GS1500-24P

Support Note

Version V1.0

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2009/07/10

ZyXEL

Unleash Networking Power

Revision History

Revision	Release Date	Summary
1.0	2009/04/01	First release
1.1	2009/04/15	In section 3.6.2, remove 'Mask' from SNMPv3 view configuration, and remove 'Security Model' from SNMPv3 group configuration and SNMPv3 access configuration.
1.2	2009/05/13	In section 6.1, update the screenshots and description

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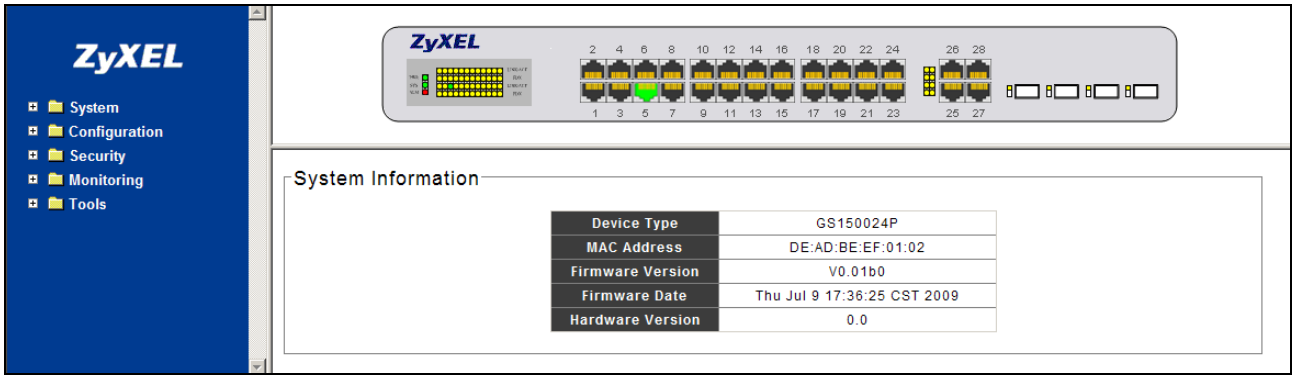
1 Introduction

This document provides a summary of the configurations supported on the GS-1500-24P Layer 2 Managed Switch Web Graphical User Interface (Web GUI). With proper network connection, the Web GUI allows the user to manage the device using a web browser.

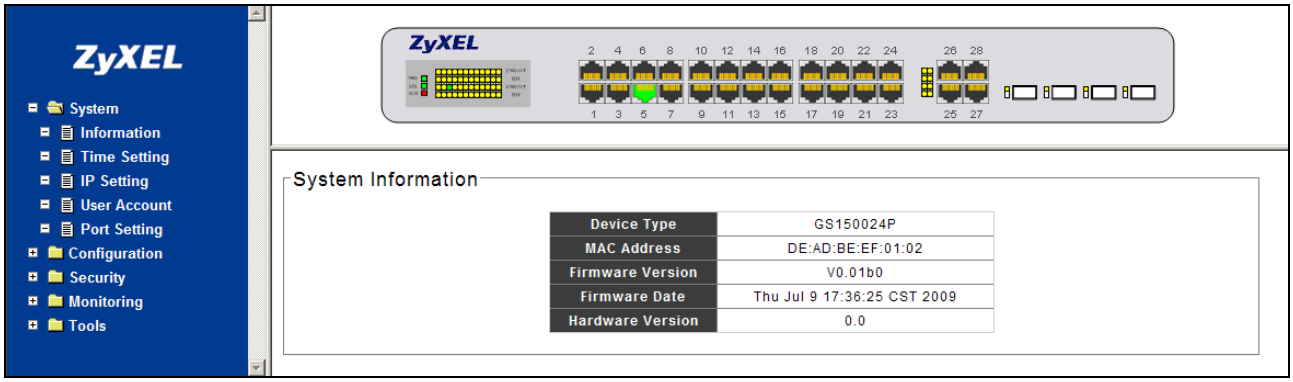
The Web GUI supports all frequently used web browsers listed below:

- Microsoft Internet Explorer 5.0 and above
- Mozilla Firefox 0.8 and above
- Netscape 7.0 and above
- Opera 7.0 and above

In the Web GUI, the left column shows the configuration menu. The top row shows the switch's current link status. Green squares indicate the port link is up, while black squares indicate the port link is down. The rest of the screen area displays the configuration settings.



2 System Configuration



There are "Information", "Time Setting", "IP Setting", "User Account", "Port Setting" configuration web pages in this section.

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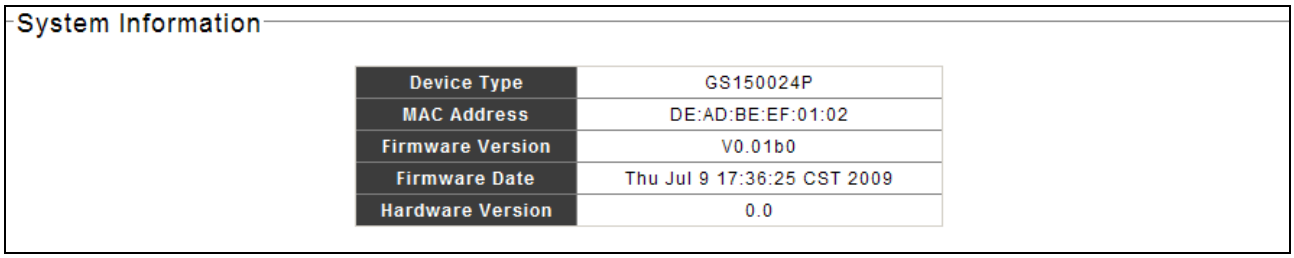
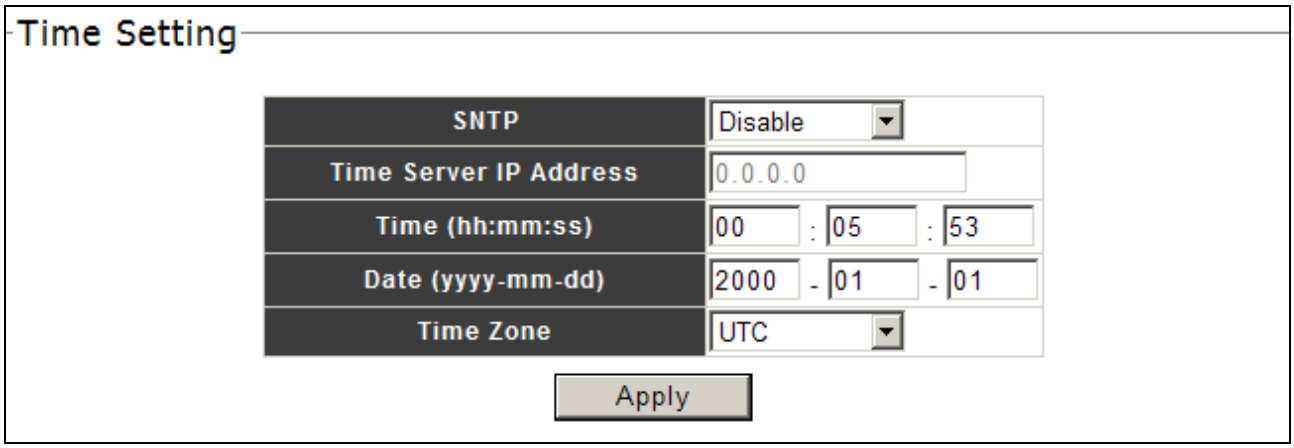
2.1 Information



Display basic information, includes system MAC address, firmware version, firmware Date and ASIC version.

2.2 Time Setting

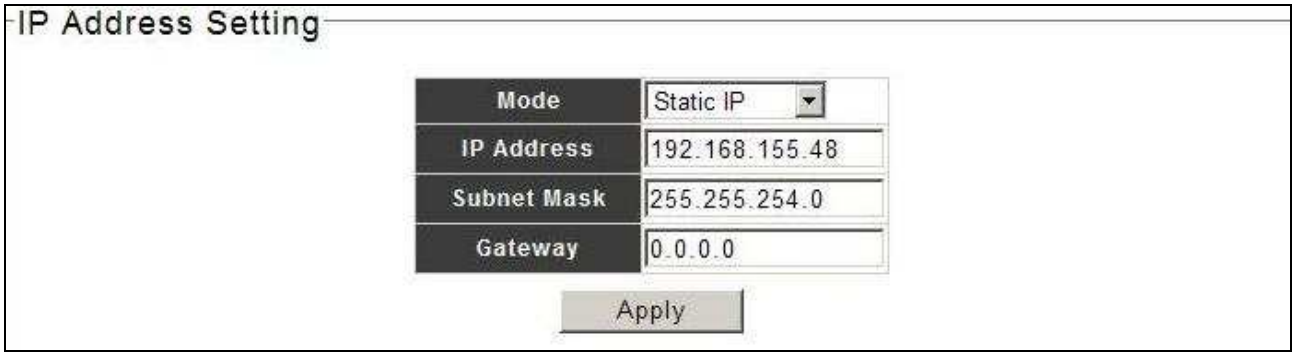


Set time manually or through SNTP(Simple Network Time Protocol) service.

Parameters:

- **SNTP** specifies the state of SNTP. (`Disable` means manual configuration)
- **Time Server IP Address** specifies the IP address of SNTP server.
- **Time** specifies the time.
- **Date** specifies the date.
- **Time Zone** specifies the time zone.

2.3 IP Setting



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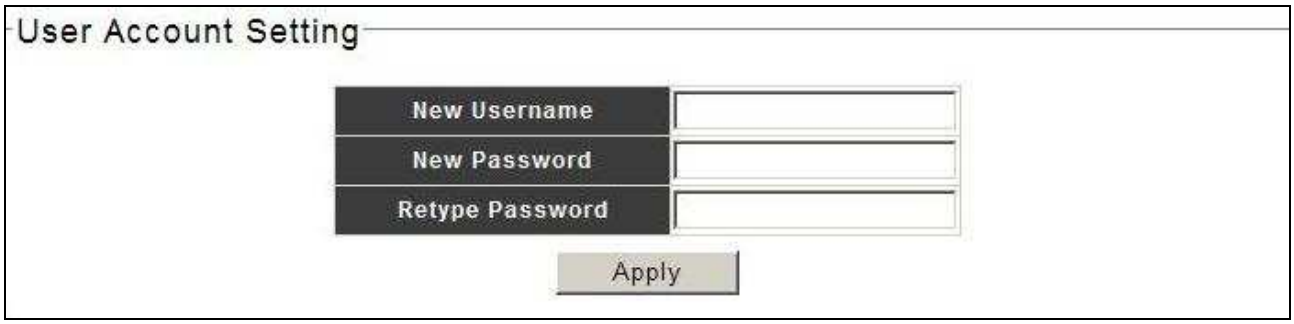
Set IP address, subnet mask, and default gateway.

Parameters:

- **Mode** specifies static IP or DHCP.
- **IP Address** specifies the IP address of the system.
- **Subnet Mask** specifies the subnet mask.
- **Gateway** specifies the IP address of default gateway.

2.4 User Account

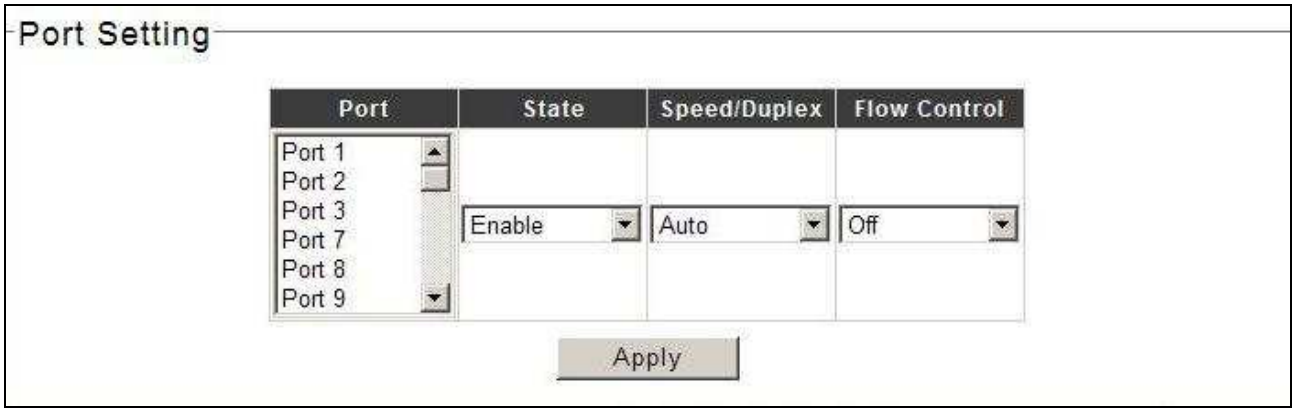


Set new user name, and password.

Parameters:

- **New Username** specifies the new user name.
- **New Password** specifies the password for the username.
- **Retype Password** reconfirms the password.

2.5 Port Setting



Set state, speed/duplex and flow control ability to specified ports.

Parameters:

- **Port** specifies the ports to set.
- **State** enable or disable the port state.
- **Speed/Duplex** specifies port speed and duplex.
- **Flow Control** specifies flow control ability.

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Port	State	Speed/Duplex		Flow Control	
		Config	Actual	Config	Actual
Port 1	Enabled	Auto	1000Full	On	Off
Port 2	Enabled	Auto	Link Down	On	Link Down
Port 3	Enabled	Auto	Link Down	On	Link Down
Port 7	Enabled	Auto	Link Down	On	Link Down
Port 8	Enabled	Auto	Link Down	On	Link Down
Port 9	Enabled	Auto	Link Down	On	Link Down
Port 10	Enabled	Auto	Link Down	On	Link Down
Port 11	Enabled	Auto	Link Down	On	Link Down
Port 12	Enabled	Auto	Link Down	On	Link Down
Port 13	Enabled	Auto	Link Down	On	Link Down
Port 14	Enabled	Auto	Link Down	On	Link Down
Port 15	Enabled	Auto	Link Down	On	Link Down
Port 16	Enabled	Auto	Link Down	On	Link Down
Port 17	Enabled	Auto	Link Down	On	Link Down
Port 18	Enabled	Auto	Link Down	On	Link Down
Port 19	Enabled	Auto	Link Down	On	Link Down
Port 20	Enabled	Auto	Link Down	On	Link Down
Port 21	Enabled	Auto	Link Down	On	Link Down
Port 22	Enabled	Auto	Link Down	On	Link Down
Port 23	Enabled	Auto	1000Full	On	On
Port 24	Enabled	Auto	Link Down	On	Link Down
Port 25	Enabled	Auto	Link Down	On	Link Down
Port 26	Enabled	Auto	Link Down	On	Link Down
Port 27	Enabled	Auto	Link Down	On	Link Down
Port 28	Enabled	Auto	Link Down	On	Link Down
Trunk1	Enabled	Auto	Link Down	On	Link Down

Display the port configuration.

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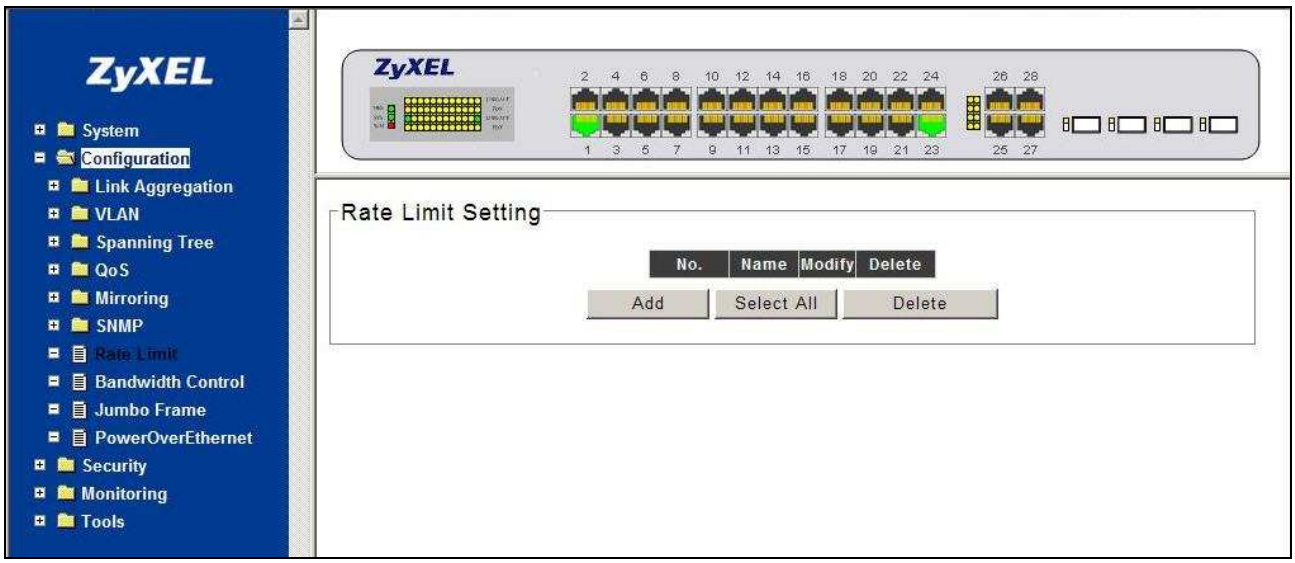
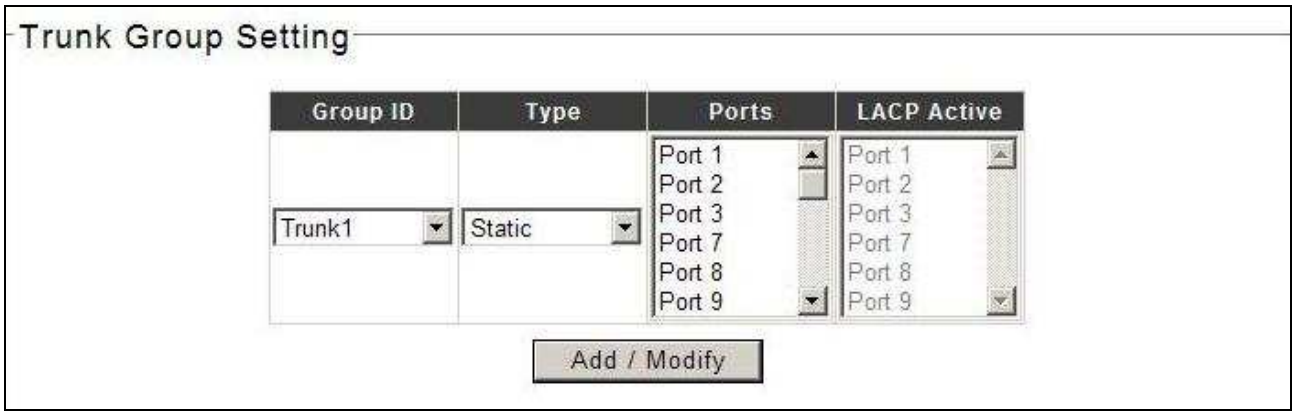
3 General Configuration



There are "Link Aggregation", "VLAN", "Spanning Tree", "QoS", "Mirroring", "SNMP", "Rate Limit", "Bandwidth Control", "Jumbo Frame" and "PowerOverEthernet" configuration web pages in this section.

3.1 Link Aggregation

3.1.1 Trunk Group Setting



Trunk group configuration.

Parameters:

- **Group ID** specifies trunk group.
- **Type** specifies the type of trunk to be "static" or "LACP" trunk.
- **Port** specifies the trunk member port.
- **LACP Active** specifies the active port.

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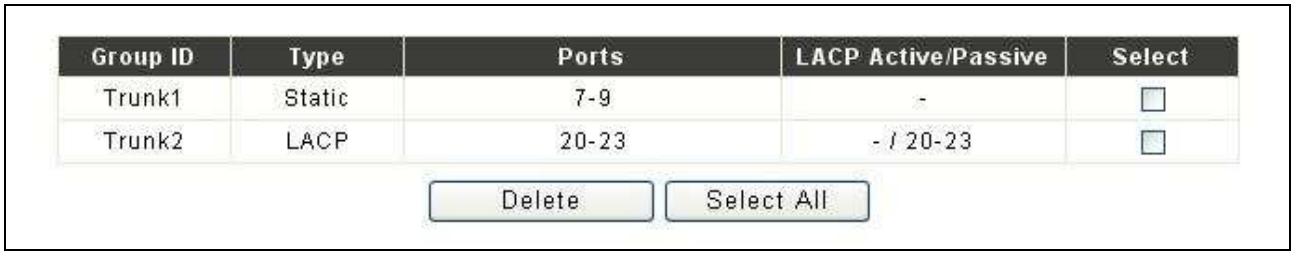
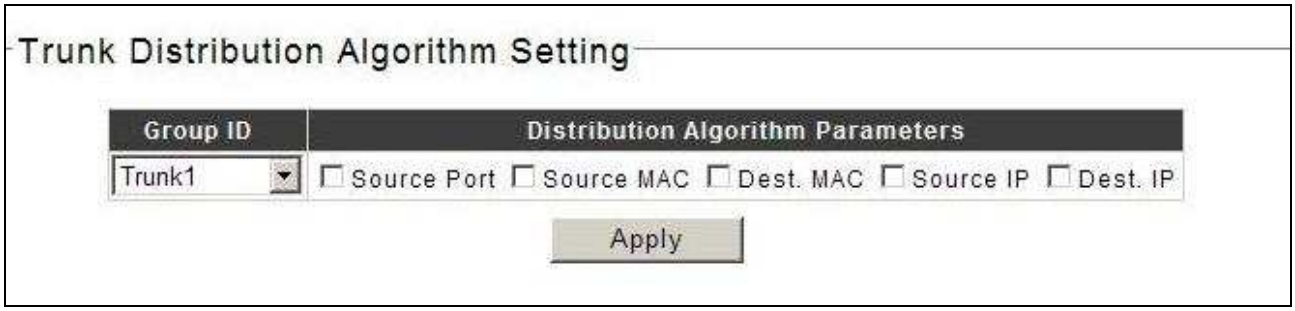


Group ID	Type	Ports	LACP Active/Passive	Select
Trunk1	Static	7-9	-	☐
Trunk2	LACP	20-23	- / 20-23	☐

Delete Select All

Display the information of trunks.

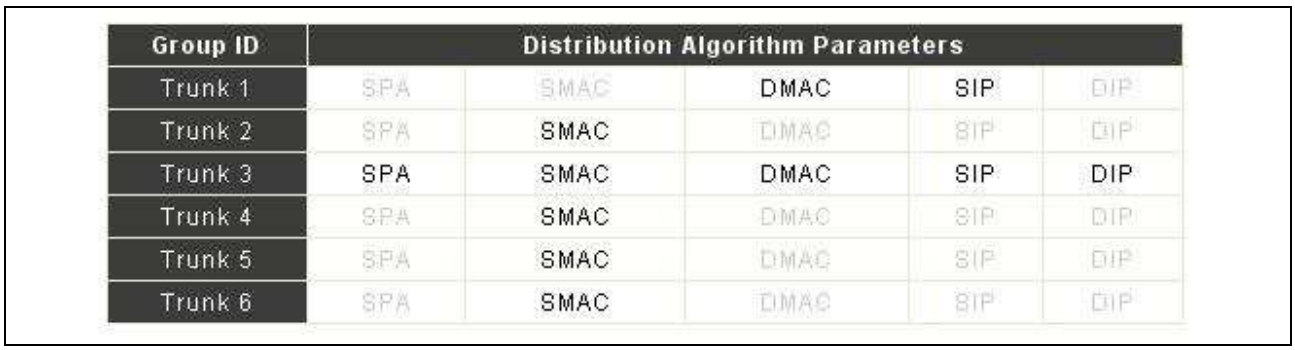
3.1.2 Trunk Distribution Algorithm



Trunk distribution algorithm configuration.

Parameters:

- **Group ID** specifies trunk group.
- **Distribution Algorithm Parameters** specifies the parameters of distribution algorithm.



Group ID	Distribution Algorithm Parameters				
Trunk 1	SPA	SMAC	DMAC	SIP	DIP
Trunk 2	SPA	SMAC	DMAC	SIP	DIP
Trunk 3	SPA	SMAC	DMAC	SIP	DIP
Trunk 4	SPA	SMAC	DMAC	SIP	DIP
Trunk 5	SPA	SMAC	DMAC	SIP	DIP
Trunk 6	SPA	SMAC	DMAC	SIP	DIP

Display the trunk distribution algorithm configurations.

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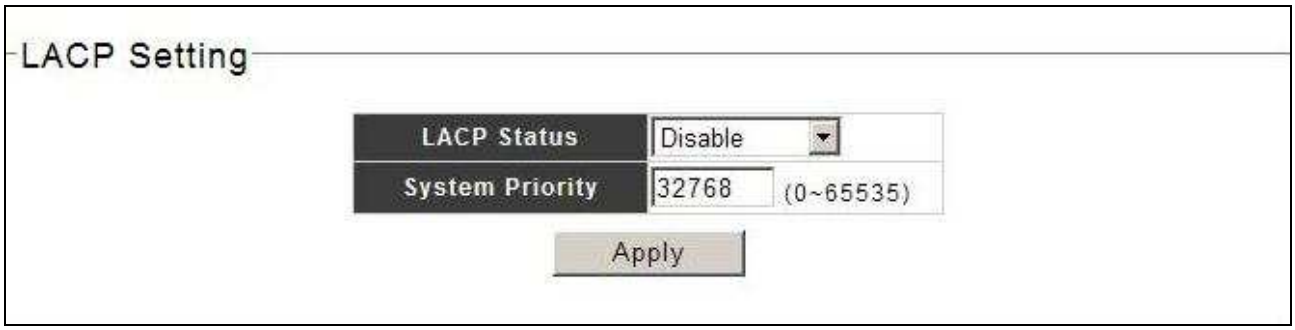
3.1.3 LACP Setting



LACP configuration.

Parameters:

- **LACP Status** enable or disable LACP.
- **System Priority** specifies the system priority, in the range 0 ~ 65535.

Port	LACP	Group ID	LACP Partner
Port1	Disabled	-	-
Port2	Disabled	-	-
Port3	Disabled	-	-
Port7	Disabled	-	-
Port8	Disabled	-	-
Port9	Disabled	-	-
Port10	Disabled	-	-
Port11	Disabled	-	-
Port12	Disabled	-	-
Port13	Disabled	-	-
Port14	Disabled	-	-
Port15	Disabled	-	-
Port16	Disabled	-	-
Port17	Disabled	-	-
Port18	Disabled	-	-
Port19	Disabled	-	-
Port23	Disabled	-	-
Port24	Disabled	-	-
Port25	Disabled	-	-
Port26	Disabled	-	-
Port27	Disabled	-	-
Port28	Disabled	-	-

Display the information of LACP.

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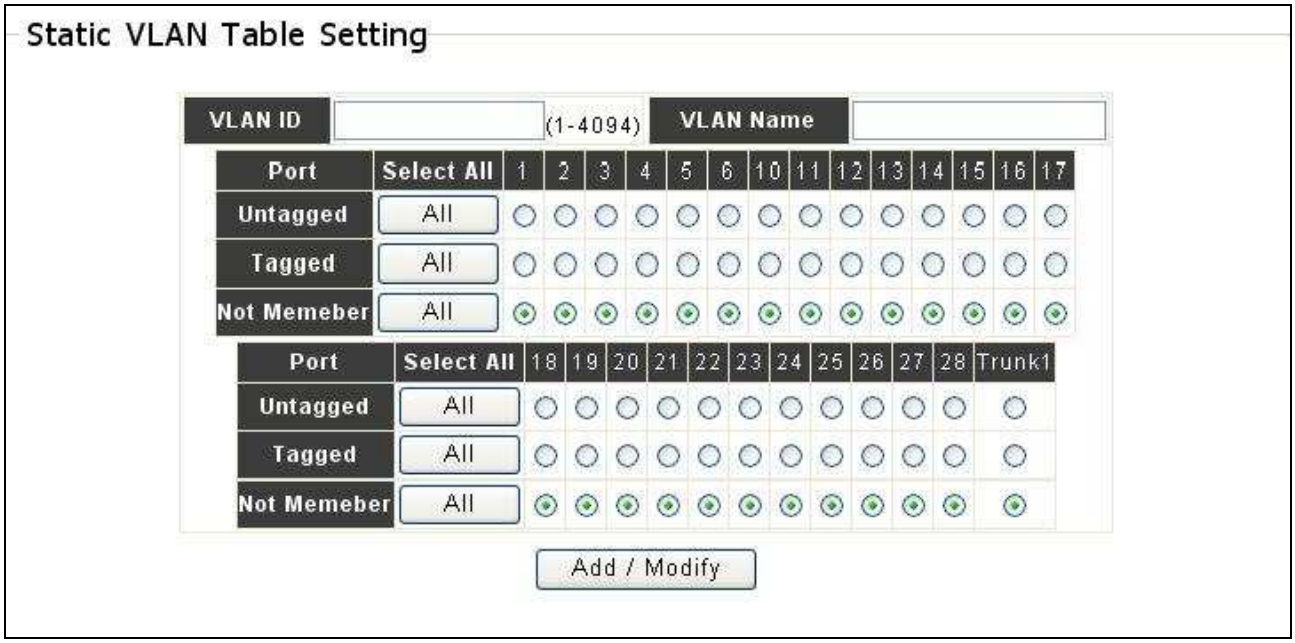
3.2 VLAN

3.2.1 Static VLAN



Static VLAN configuration.

Parameters:

- **VLAN ID** specifies VLAN ID, in the range 1 ~ 4094.
- **VLAN Name** specifies the VLAN name, up to 16 characters.
- **UnTagged/Tagged/Not Member** specifies the member ports and port type.

Display the VLAN configuration.

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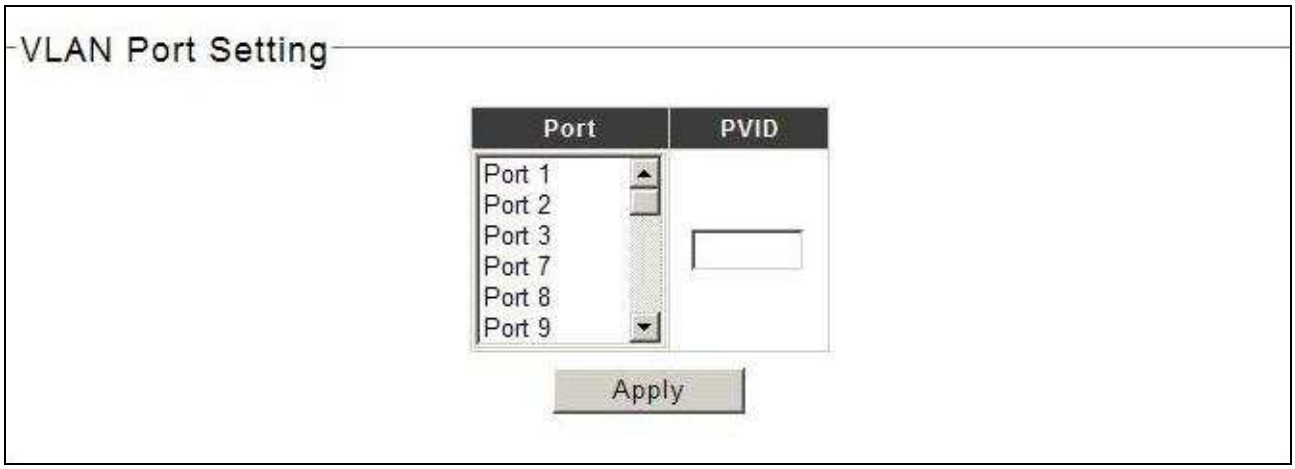
3.2.2 Port based VLAN



Port-based VLAN configuration.

Parameters:

- **Port** specifies the port to set.
- **PVID** specifies the port configured VLAN ID.

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Port	PVID
Port 1	1
Port 2	1
Port 3	1
Port 7	1
Port 8	1
Port 9	1
Port 10	1
Port 11	1
Port 12	1
Port 13	1
Port 14	1
Port 15	1
Port 16	1
Port 17	1
Port 18	1
Port 19	1
Port 20	1
Port 21	1
Port 22	1
Port 23	1
Port 24	1
Port 25	1
Port 26	1
Port 27	1
Port 28	1
Trunk1	1

Display the port-based VLAN information.

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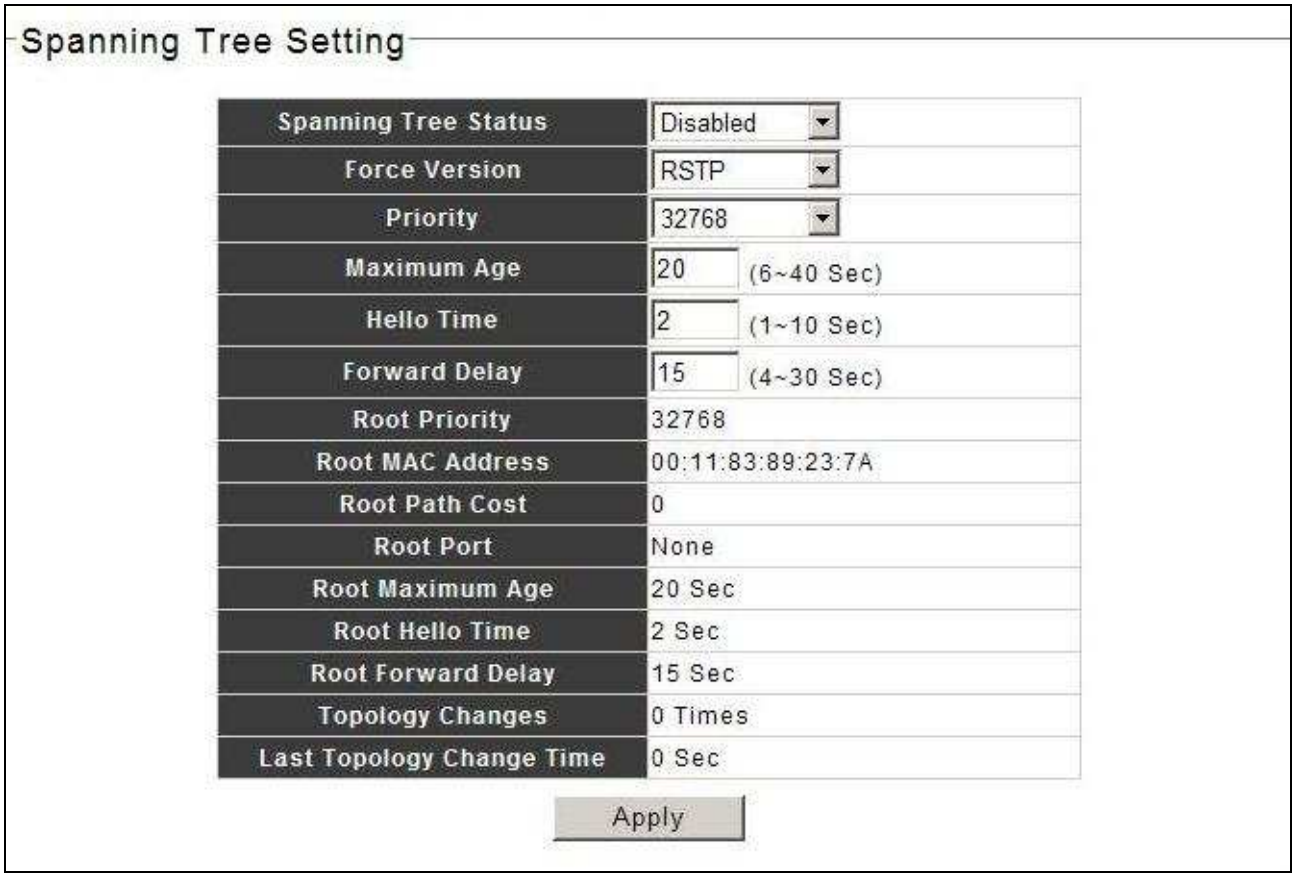
3.3 Spanning Tree

3.3.1 STP Global Setting



Spanning tree configuration.

Parameters:

- **Spanning Tree Status** enable or disable spanning tree.
- **Force Version** specifies the protocol version. It could be **STP** or **RSTP**.
- **Priority** specifies the priority, in the range 0 ~ 61440.
- **Maximum Age** specifies the maximum age, in the range 6 ~ 40 seconds.
- **Hello Time** specifies the hello time, in the range 1 ~ 10 seconds.
- **Forward Delay** specifies the forward delay, in the range 4 ~ 30 seconds.
- **Root Priority** displays the priority of the root bridge.
- **Root MAC Address** displays the MAC address of the root bridge.
- **Root Path Cost** displays the spanning tree path cost to the root bridge.
- **Root Port** displays the port has the lowest path cost to the root bridge.
- **Root Maximum Age** displays the maximum age of the root bridge.
- **Root Hello Time** displays the hello time of the root bridge.
- **Root Forward Delay** displays the forward delay of the root bridge.
- **Topology Changes** displays the times of topology change.
- **Last Topology Change Time** displays the time of the last topology change.

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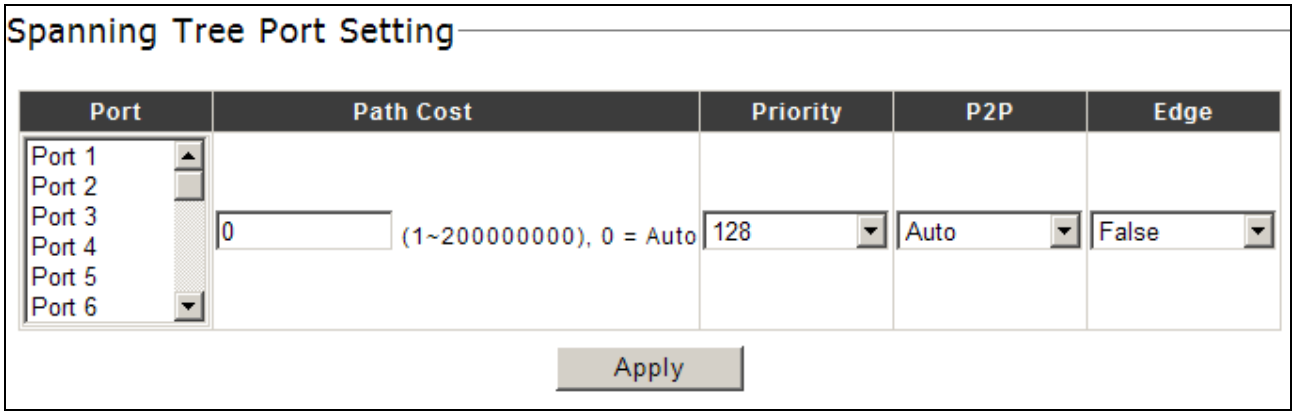
3.3.2 STP Port Setting



Spanning tree port configuration.

Parameters:

- **Port** specifies the ports to set.
- **Path Cost** specifies path cost, in the range 1~200000000. Value 0 means Auto.
- **Priority** specifies the priority.
- **P2P** specifies the point-to-point connection. It can be **False**, **True**, or **Auto**.
- **Edge** specifies whether it is an edge connection.

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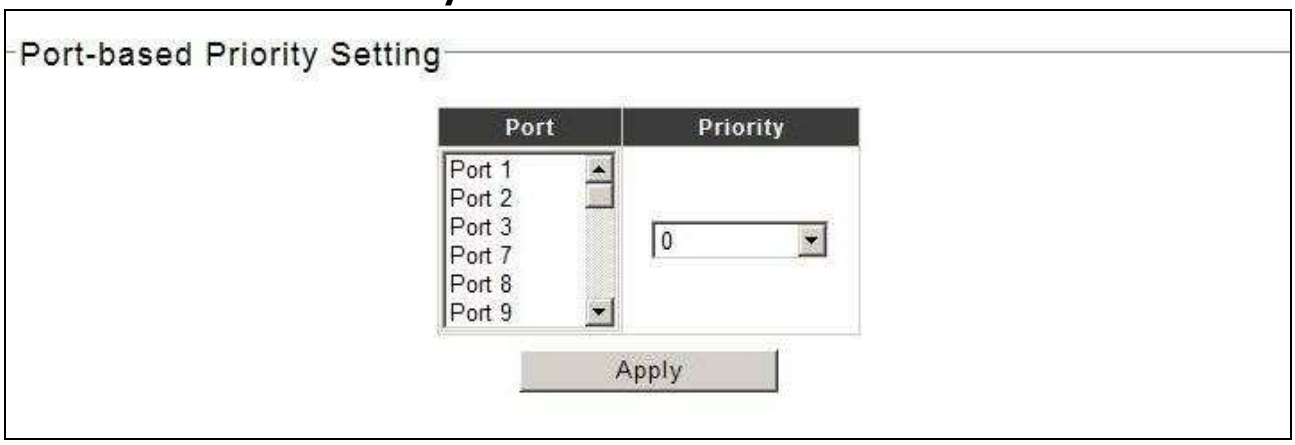
Port	State	Role	Path Cost		Priority	P2P		Edge	
			Config	Actual		Config	Actual	Config	Actual
Port 1	Disabled	-	20000	0	128	Auto	-	False	-
Port 2	Disabled	-	200000	0	128	Auto	-	False	-
Port 3	Disabled	-	200000	0	128	Auto	-	False	-
Port 7	Disabled	-	200000	0	128	Auto	-	False	-
Port 8	Disabled	-	200000	0	128	Auto	-	False	-
Port 9	Disabled	-	200000	0	128	Auto	-	False	-
Port 10	Disabled	-	200000	0	128	Auto	-	False	-
Port 11	Disabled	-	200000	0	128	Auto	-	False	-
Port 12	Disabled	-	200000	0	128	Auto	-	False	-
Port 13	Disabled	-	200000	0	128	Auto	-	False	-
Port 14	Disabled	-	200000	0	128	Auto	-	False	-
Port 15	Disabled	-	200000	0	128	Auto	-	False	-
Port 16	Disabled	-	200000	0	128	Auto	-	False	-
Port 17	Disabled	-	200000	0	128	Auto	-	False	-
Port 18	Disabled	-	200000	0	128	Auto	-	False	-
Port 19	Disabled	-	200000	0	128	Auto	-	False	-
Port 20	Disabled	-	200000	0	128	Auto	-	False	-
Port 21	Disabled	-	200000	0	128	Auto	-	False	-
Port 22	Disabled	-	200000	0	128	Auto	-	False	-
Port 23	Disabled	-	20000	0	128	Auto	-	False	-
Port 24	Disabled	-	200000	0	128	Auto	-	False	-
Port 25	Disabled	-	200000	0	128	Auto	-	False	-
Port 26	Disabled	-	200000	0	128	Auto	-	False	-
Port 27	Disabled	-	200000	0	128	Auto	-	False	-
Port 28	Disabled	-	200000	0	128	Auto	-	False	-
Trunk1	Disabled	-	200000	0	128	Auto	-	False	-

Display the spanning tree port information.

3.4 QoS

3.4.1 Port-based Priority



Port-based(802.1p default) priority configuration.

Parameters:

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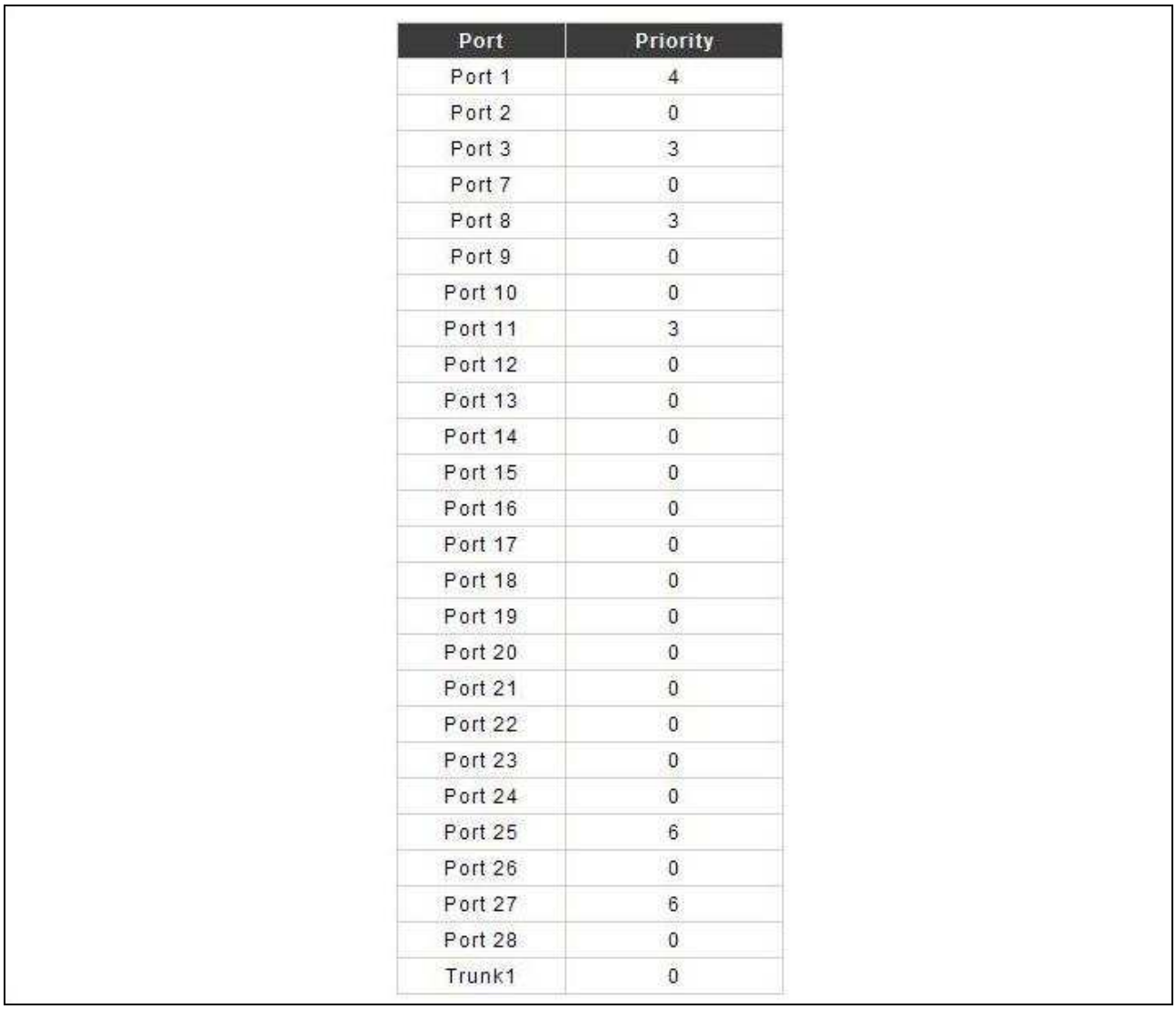
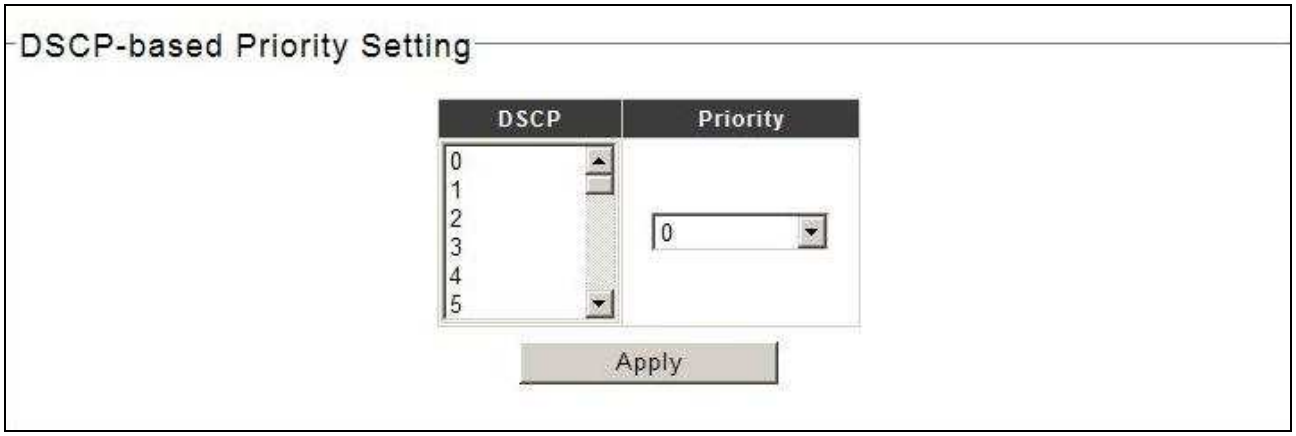
- **Port** specifies the ports to set.
- **Priority** specifies the 802.1p priority value.



Port	Priority
Port 1	4
Port 2	0
Port 3	3
Port 7	0
Port 8	3
Port 9	0
Port 10	0
Port 11	3
Port 12	0
Port 13	0
Port 14	0
Port 15	0
Port 16	0
Port 17	0
Port 18	0
Port 19	0
Port 20	0
Port 21	0
Port 22	0
Port 23	0
Port 24	0
Port 25	6
Port 26	0
Port 27	6
Port 28	0
Trunk1	0

Display the port-based priority information.

3.4.2 DSCP-based Priority



DSCP-based priority configuration.

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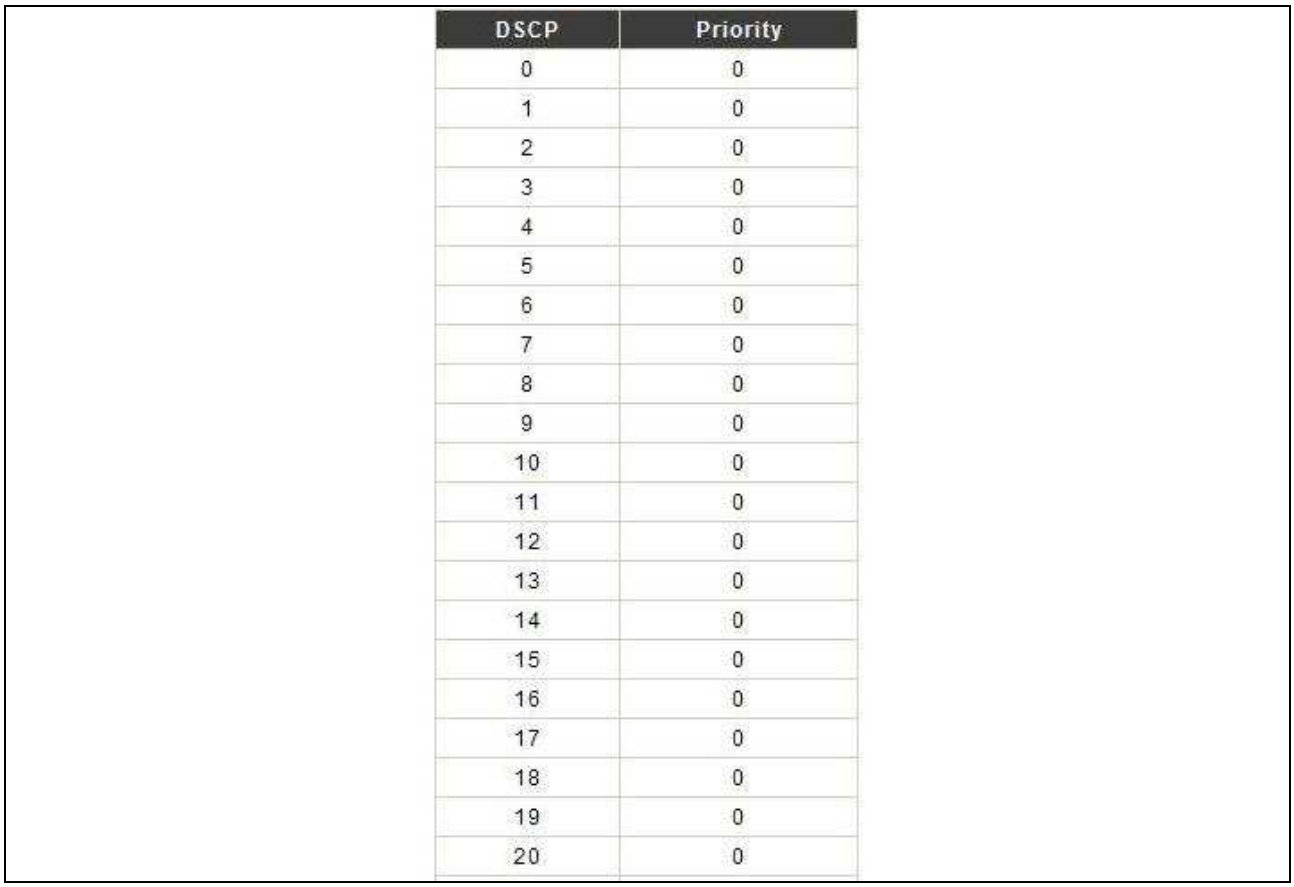
Parameters:

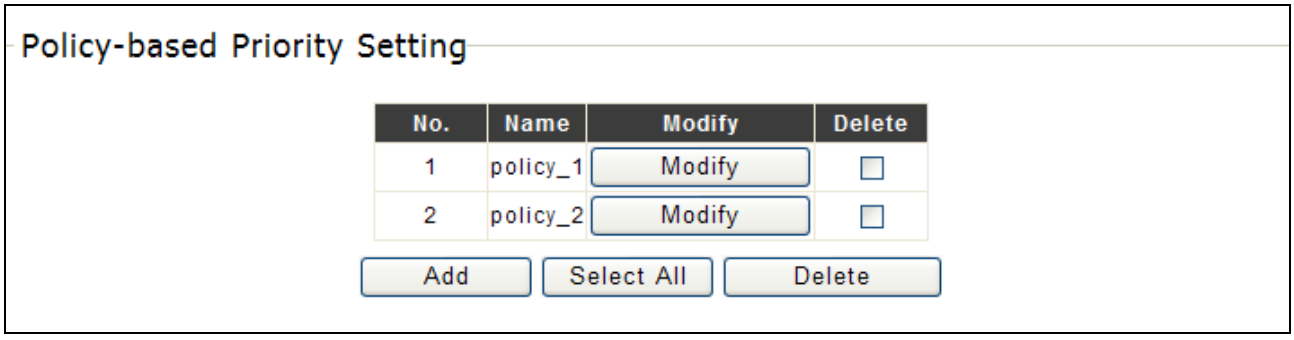
- **DSCP** specifies the DSCP value to map with 802.1p priority.
- **Priority** specifies the 802.1p priority value to map.



DSCP	Priority
0	0
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0
16	0
17	0
18	0
19	0
20	0

Display the DSCP remapping information.

3.4.3 Policy-based Priority



Add a new priority policy or modify/delete an existing priority policy.

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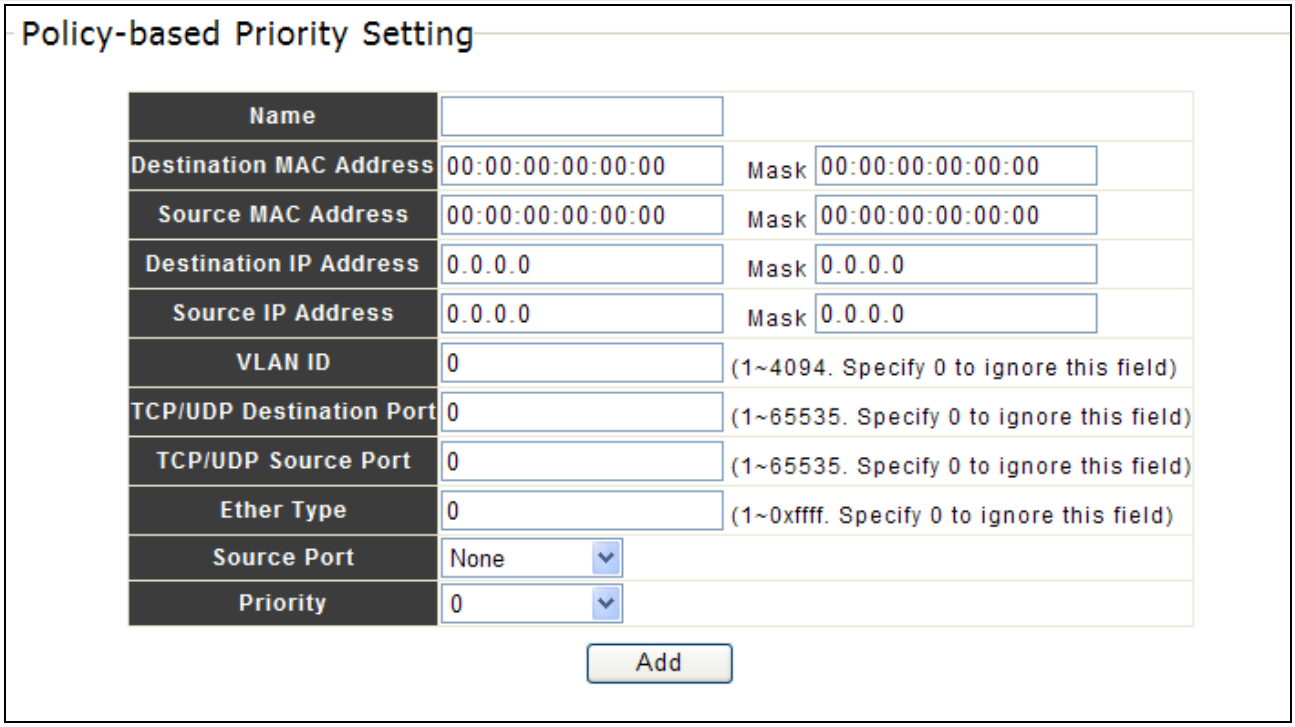

Policy-based priority configuration.

Parameters:

- **Name** specifies the policy name.
- **Destination MAC Address/Mask** specifies the destination MAC address and its mask.
- **Source MAC Address/Mask** specifies the source MAC address and its mask.
- **Destination IP Address/Mask** specifies the destination IP address and its mask.
- **Source IP Address/Mask** specifies the source IP address and its mask.
- **VLAN ID** specifies the VLAN.
- **TCP/UDP Destination Port** specifies the TCP/UDP destination port.
- **TCP/UDP Source Port** specifies the TCP/UDP source port.
- **Ether Type** specifies the ether type. Such as 0x0806 for ARP, 0x0800 for IP.
- **Source Port** specifies the incoming port of switch.
- **Priority** assigns the priority to a packet that matches the policy.

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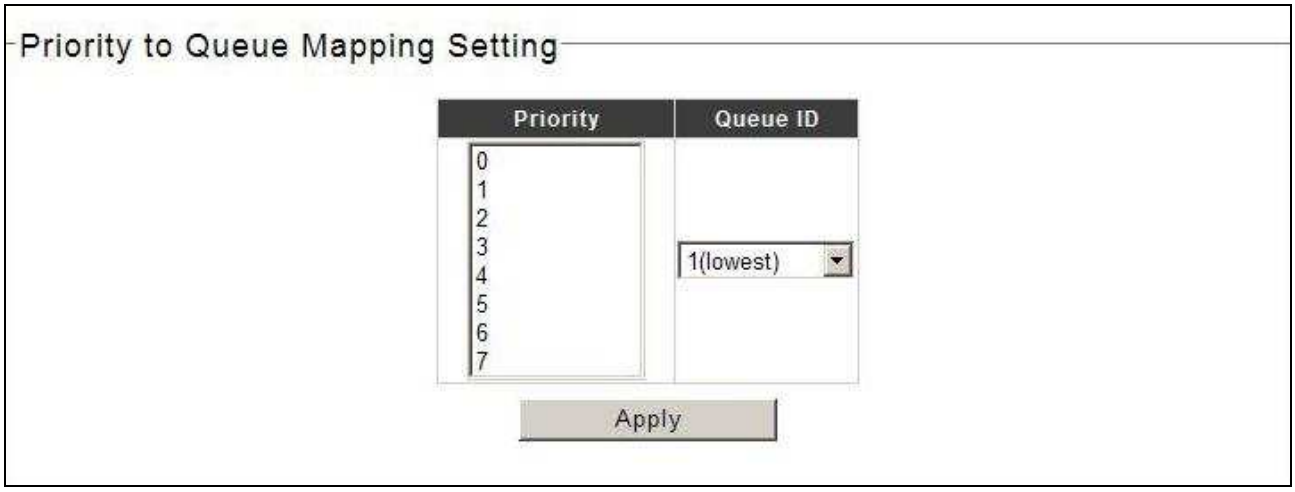
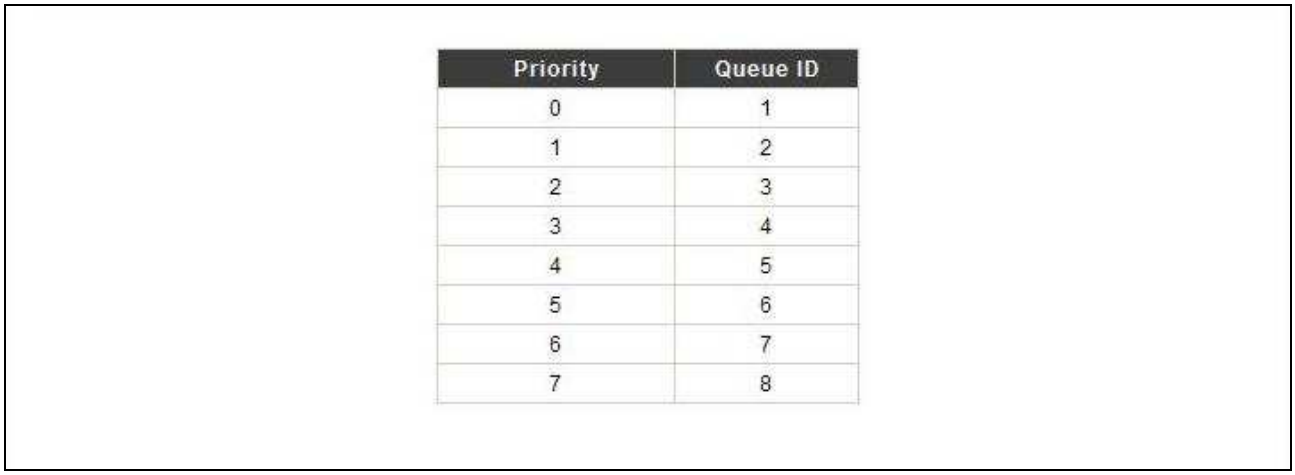
3.4.4 Priority to Queue Mapping



Priority to queue mapping configuration.

Parameters:

- **Priority** specifies a priority to set.
- **Queue ID** specifies queue ID. Queue ID 1 is the lowest queue.



Priority	Queue ID
0	1
1	2
2	3
3	4
4	5
5	6
6	7
7	8

Display the priority to queue mapping table.

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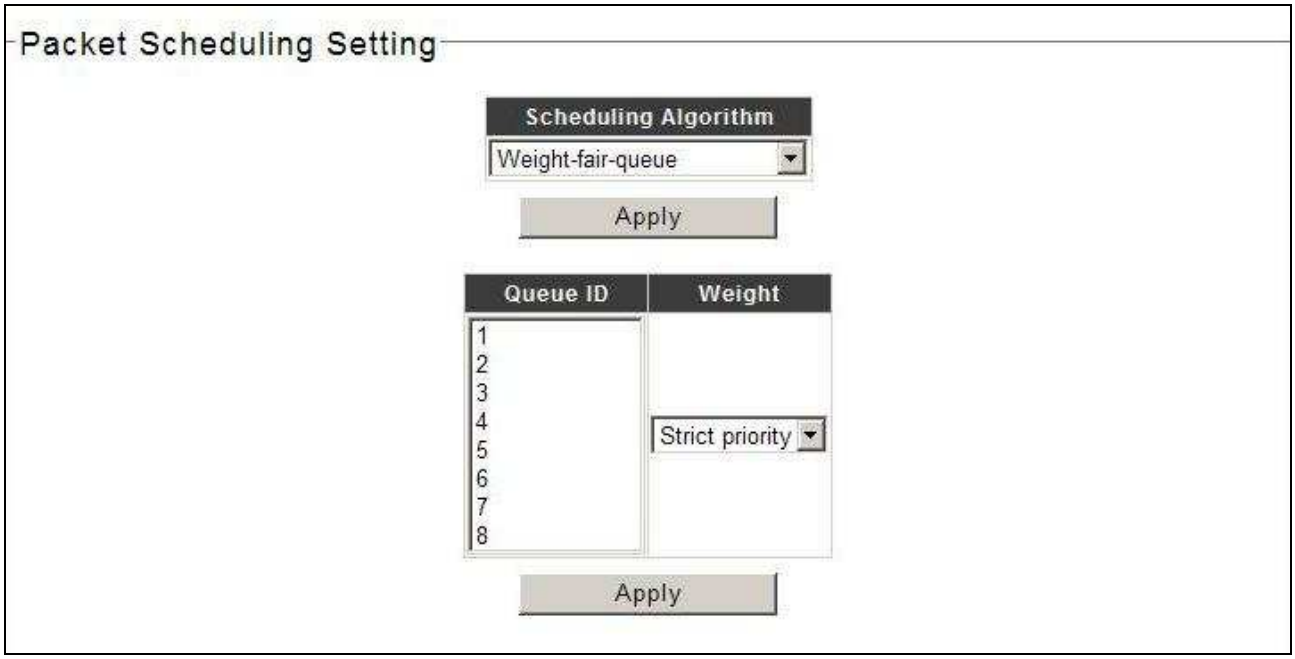
3.4.5 Packet Scheduling



Packet scheduling configuration.

- **Scheduling Algorithm** specifies the Weight-fair-queue or Weight-round-robin of scheduling algorithm.
- **Queue ID** specifies queue ID.
- **Weight** specifies the weight of queue, the value could be strict priority or 1~15

Queue ID	Scheduling Algorithm	Weight
1	Weight-fair-queue	1
2	Weight-fair-queue	2
3	Weight-fair-queue	11
4	Weight-fair-queue	4
5	Weight-fair-queue	Strict priority
6	Weight-fair-queue	6
7	Weight-fair-queue	7
8	Weight-fair-queue	8

Display the packet scheduling information.

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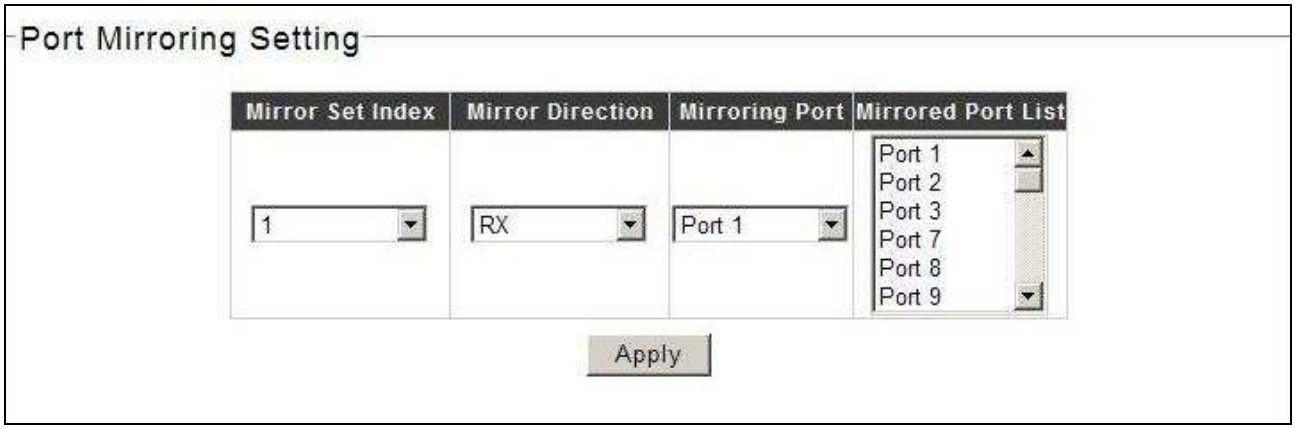
3.5 Mirroring

3.5.1 Port-based Mirroring



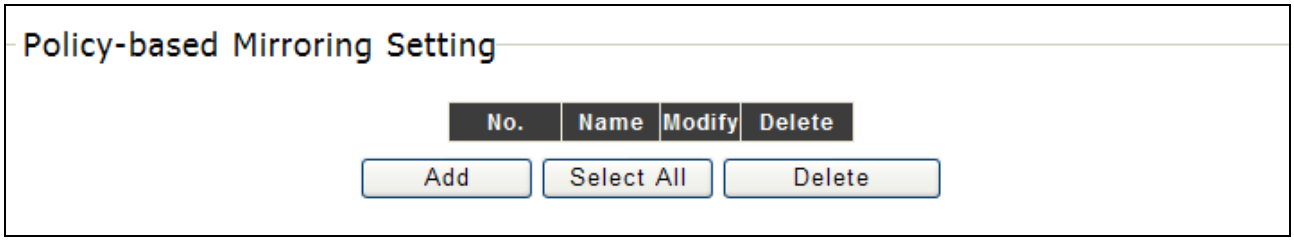
Port-based mirror configuration.

Parameters:

- **Mirror Set Index** specifies mirror set 1 or 2.
- **Mirror Direction** specifies to monitor RX(Ingress) or TX(Egress).
- **Mirroring Port** specifies analysis port on which traffic would be forwarded for analysis.
- **Mirrored Port List** specifies monitored ports. The traffic of these ports would be mirrored to mirroring port.

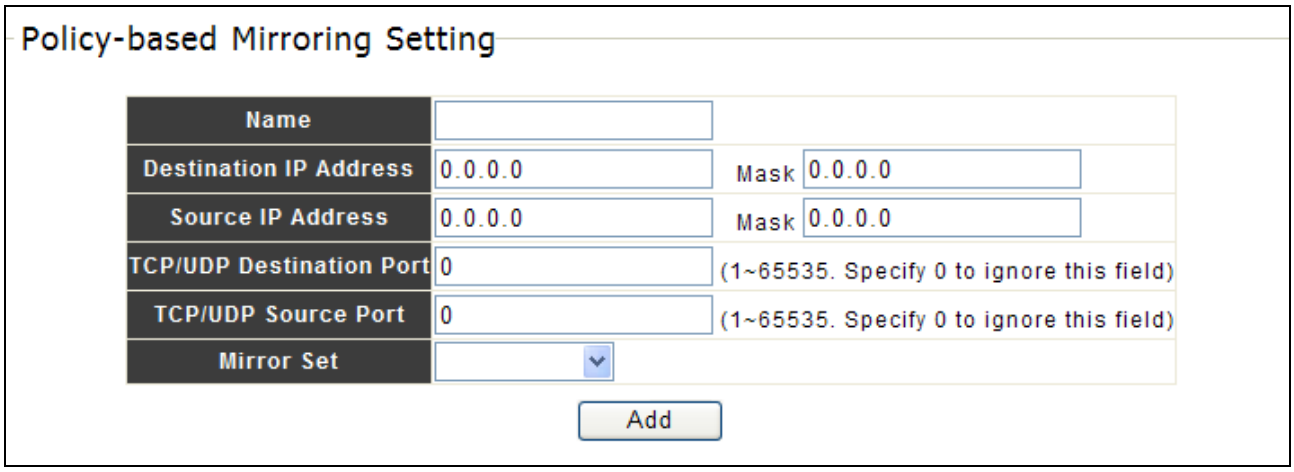
Display the information of port mirror.

3.5.2 Policy-based Mirroring



Add a new policy or modify/delete an existing policy.

All contents copyright (c) 2009 ZyXEL Communications Corporation.



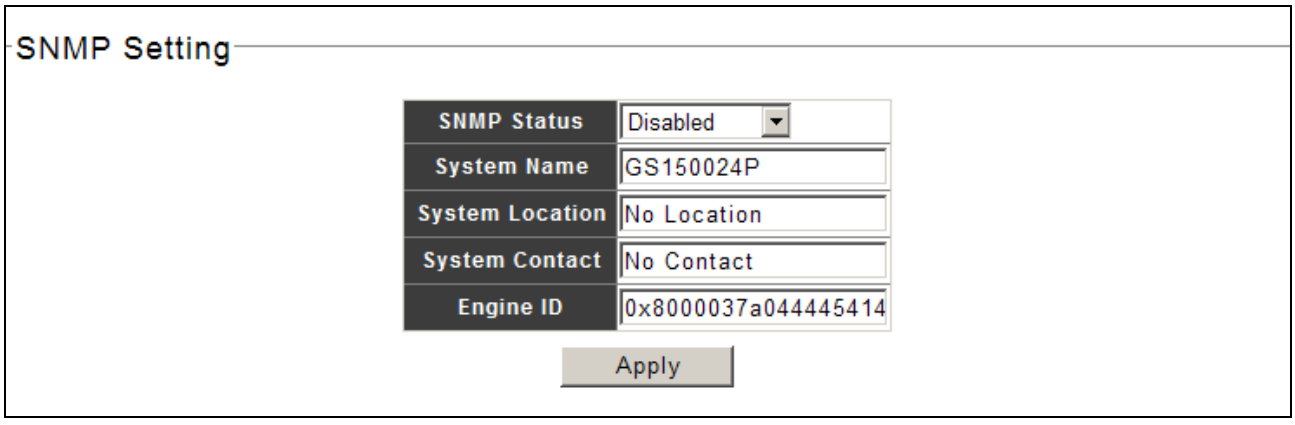
Policy-based mirroring configuration.

Parameters:

- **Name** specifies the policy name.
- **Destination IP Address/Mask** specifies the destination IP address and its mask.
- **Source IP Address/Mask** specifies the source IP address and its mask.
- **TCP/UDP Destination Port** specifies the TCP/UDP destination port.
- **TCP/UDP Source Port** specifies the TCP/UDP source port.
- **Mirror Set** specifies the mirror set that configured in "Port Mirroring Setting". A packet that matches the policy will be mirrored to the mirroring port that points by the specified mirror set.

3.6 SNMP

3.6.1 SNMP Setting



SNMP system configuration.

Parameters:

- **SNMP Status** enable or disable SNMP.
- **System Name** specifies the system name string.
- **System Location** specifies the location string.
- **System Contact** specifies the contact string.
- **Engine ID** specifies the engine ID in text string, up to 15 characters. It will be

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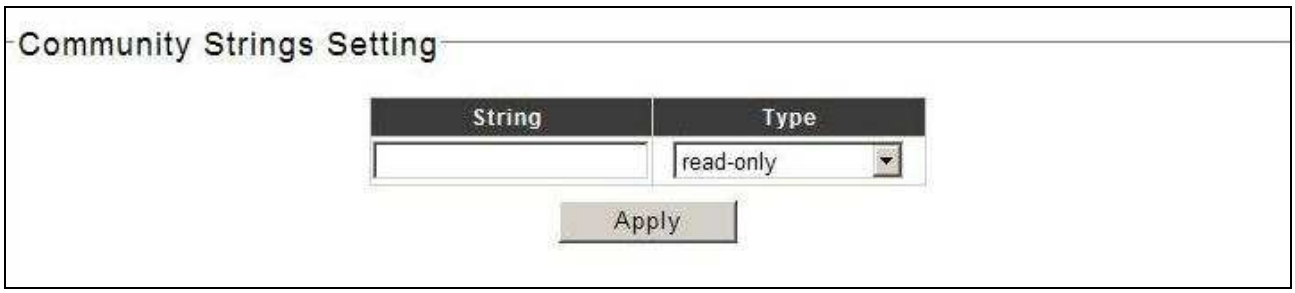
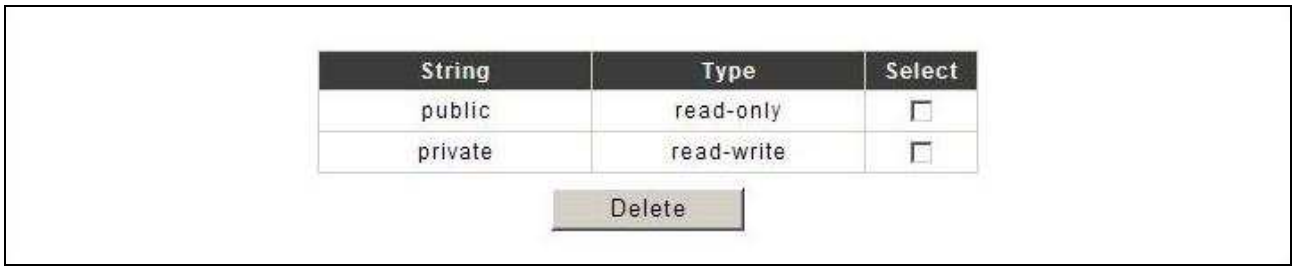
translated to hexadecimal format for displaying.



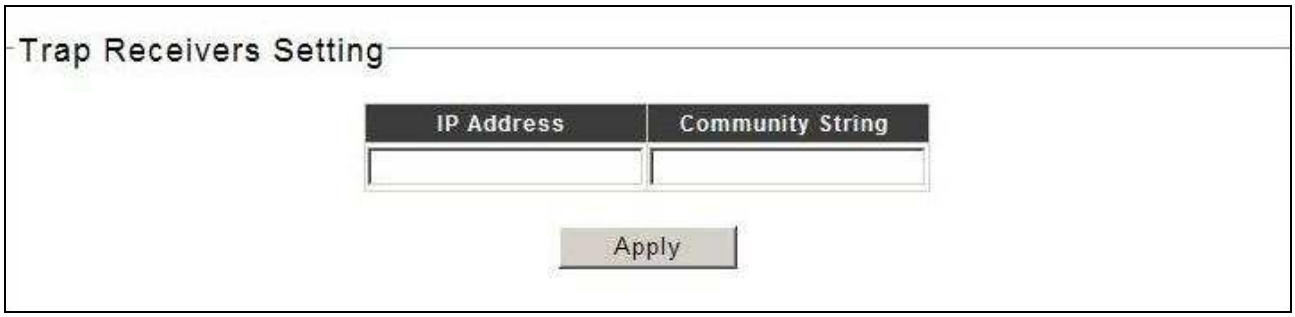
SNMP community strings configuration.

Parameters:

- **String** specifies the community string.
- **Type** specifies the type of the community string. It can be **read-only** or **read-write**.



Display the information of SNMP community.



SNMP trap receivers configuration. Up to 4 receivers.

Parameters:

- **IP Address** specifies the receiver's IP address.
- **Community String** specifies the related community string.

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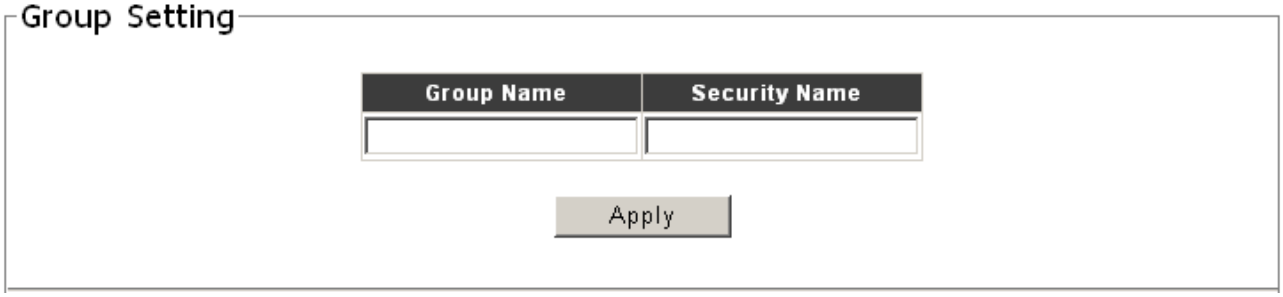
Display the information of SNMP trap receiver.

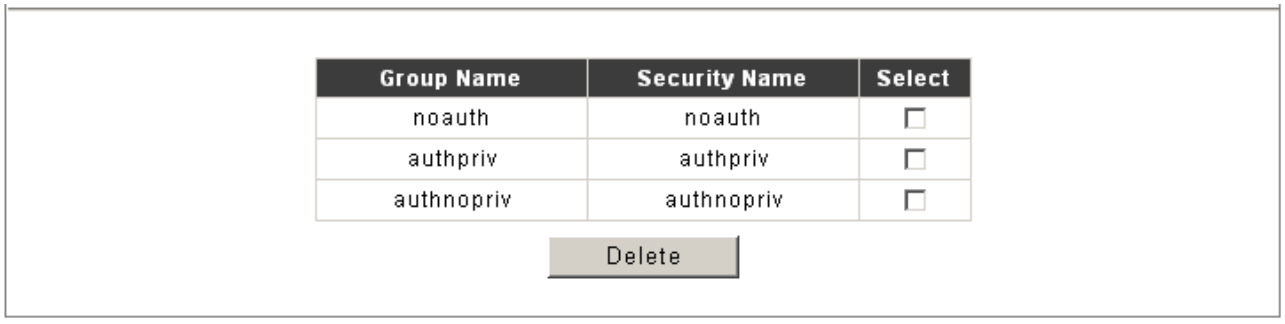
3.6.2 SNMPv3 Setting



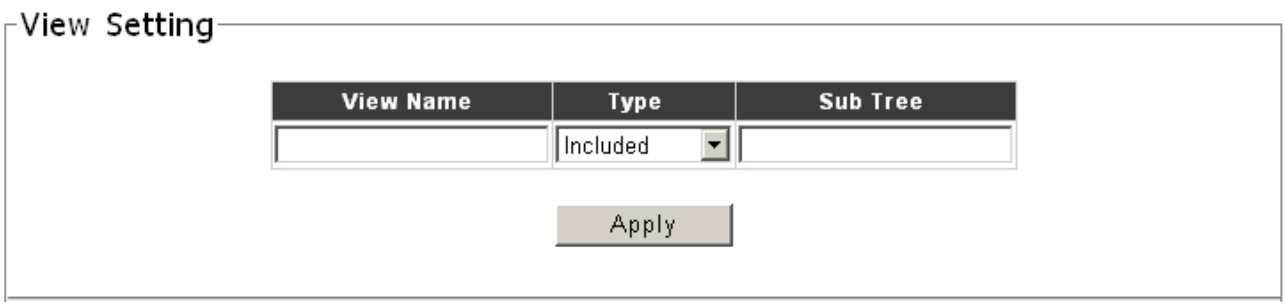
SNMPv3 group configuration.

Parameters:

- **Group Name** specifies the group name, up to 15 characters.
- **Security Name** specifies the security name, up to 15 characters.



Display the information of SNMPv3 group table.



SNMPv3 view configuration.

Parameters:

- **View Name** specifies the view name, up to 15 characters.
- **Type** specifies the view type. It can be Included or Excluded.
- **Sub Tree** specifies the view subtree (e.g. .1.3.6.1.2.1).

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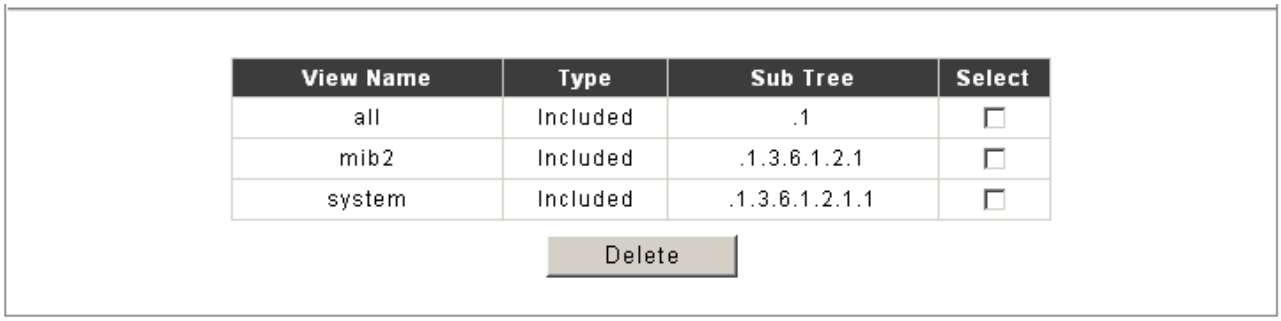
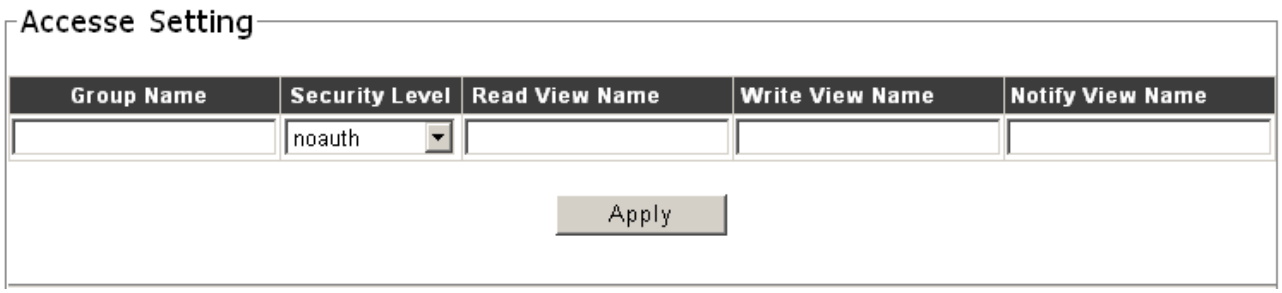


View Name	Type	Sub Tree	Select
all	Included	.1	☐
mib2	Included	.1.3.6.1.2.1	☐
system	Included	.1.3.6.1.2.1.1	☐

Delete

Display the information of SNMP view list.



Accesse Setting

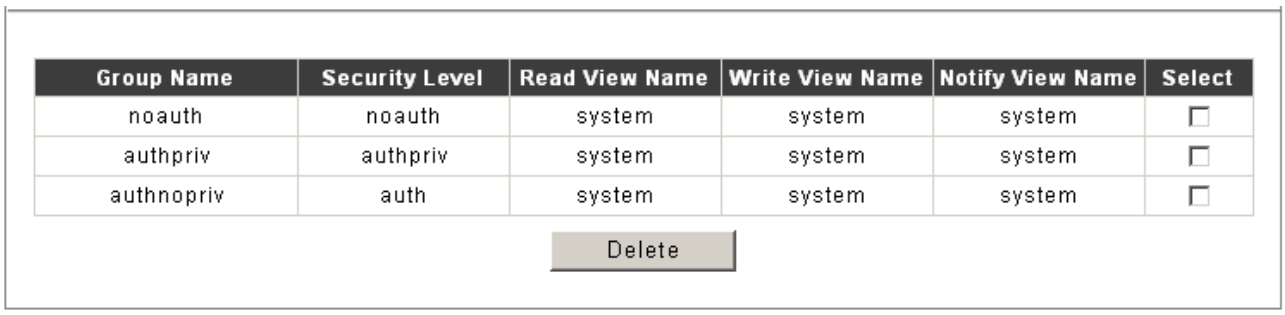
Group Name	Security Level	Read View Name	Write View Name	Notify View Name
	noauth			

Apply

SNMPv3 access control configuration.

Parameters:

- **Group Name** specifies the group name, up to 15 characters.
- **Security Level** specifies the security level. It can be noauth, auth(authentication) or authpriv(authentication and encryption).
- **Read View Name** specifies the access read view name, up to 15 characters.
- **Write View Name** specifies the access write view name, up to 15 characters.
- **Notify View Name** specifies the access notify view name, up to 15 characters.



Group Name	Security Level	Read View Name	Write View Name	Notify View Name	Select
noauth	noauth	system	system	system	☐
authpriv	authpriv	system	system	system	☐
authnopriv	auth	system	system	system	☐

Delete

Display the information of SNMP access control.

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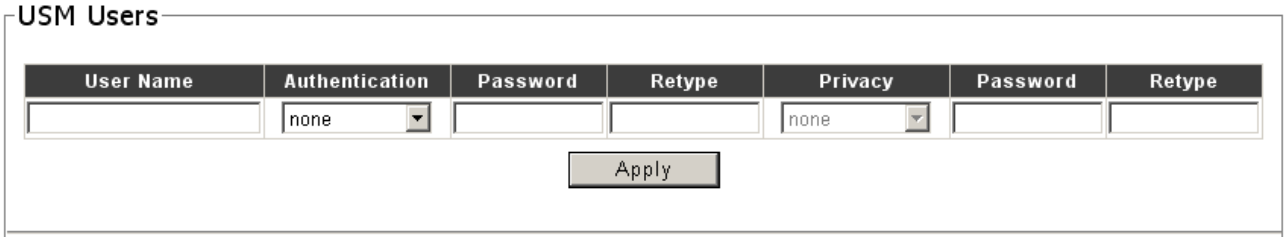
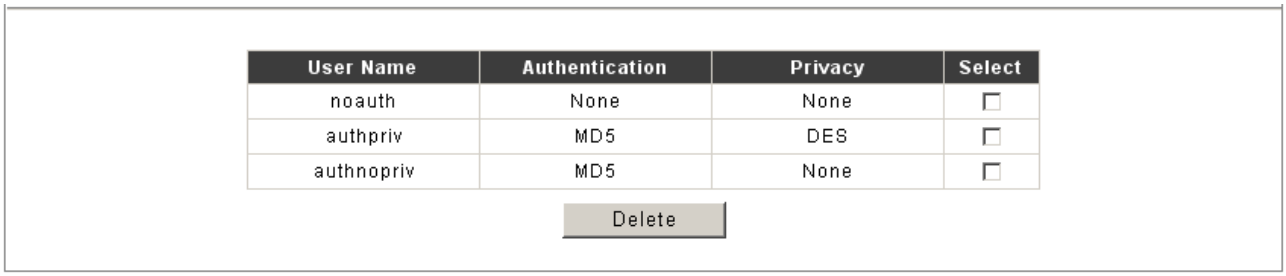


SNMPv3 USM user configuration.

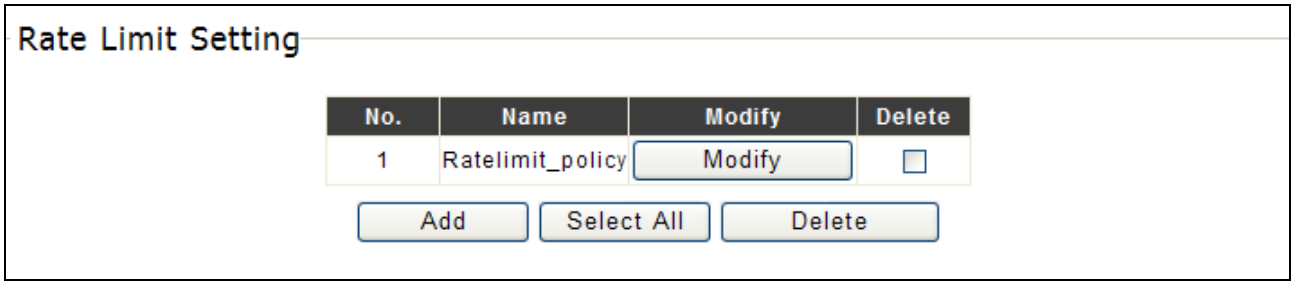
Parameters:

- **User Name** specifies the user name, up to 15 characters.
- **Authentication** specifies the authentication password. It can be none or MD5. If MD5 is selected, please type the password in two right filed, **Password** and **Retype**.
- **Privacy** specifies the encryption password. It can be none or DES. If DES is selected, please type the password in two right filed, **Password** and **Retype** (Note: if Authentication is none, the default value of Privacy is none).



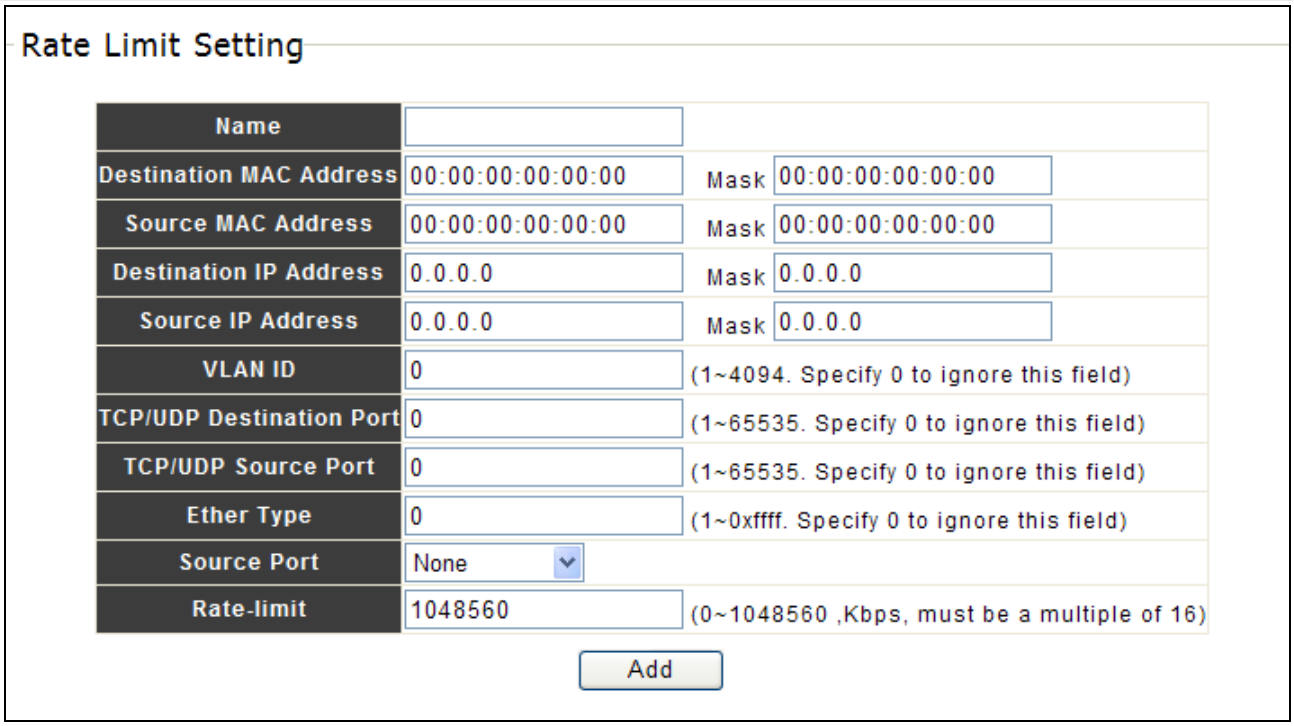
Display the information of SNMP USM user.

3.7 Rate Limit



Add a new policy or modify/delete an existing policy.

All contents copyright (c) 2009 ZyXEL Communications Corporation.



Rate-limit priority configuration.

Parameters:

- **Name** specifies the policy name.
- **Destination MAC Address/Mask** specifies the destination MAC address and its mask.
- **Source MAC Address/Mask** specifies the source MAC address and its mask.
- **Destination IP Address/Mask** specifies the destination IP address and its mask.
- **Source IP Address/Mask** specifies the source IP address and its mask.
- **VLAN ID** specifies the VLAN.
- **TCP/UDP Destination Port** specifies the TCP/UDP destination port.
- **TCP/UDP Source Port** specifies the TCP/UDP source port.
- **Ether Type** specifies the ether type. Such as 0x0806 for ARP, 0x0800 for IP.
- **Source Port** specifies the incoming port of switch.
- **Rate-limit** specifies the rate-limit for a packet that matches the policy, in range 0-1048560 kbps and must be a multiple of 16.

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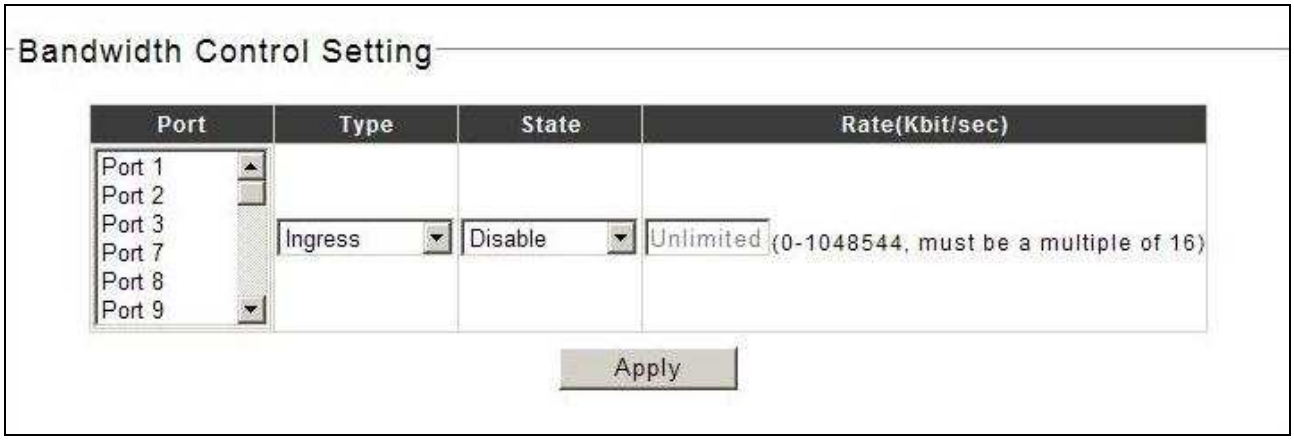
3.8 Bandwidth Control



Bandwidth control configuration.

Parameters:

- **Port** specifies the port to set.
- **Type** specifies ingress or egress rate to set.
- **State** enable or disable bandwidth control.
- **Rate** specifies the rate, in range 0-1048544 kbps and must be a multiple of 16.

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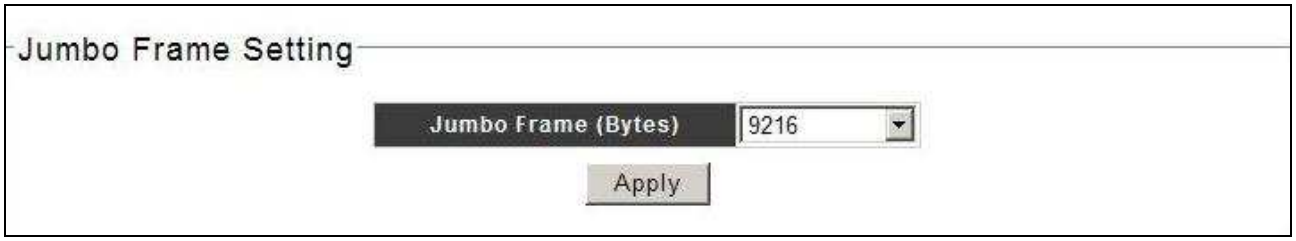
Port	Ingress Rate (Kbit/sec)	Egress Rate (Kbit/sec)
Port 1	16000	Unlimited
Port 2	Unlimited	32000
Port 3	16000	Unlimited
Port 7	16000	Unlimited
Port 8	Unlimited	32000
Port 9	16000	Unlimited
Port 10	Unlimited	Unlimited
Port 11	Unlimited	Unlimited
Port 12	Unlimited	Unlimited
Port 13	Unlimited	Unlimited
Port 14	Unlimited	Unlimited
Port 15	Unlimited	Unlimited
Port 16	Unlimited	Unlimited
Port 17	Unlimited	Unlimited
Port 18	Unlimited	Unlimited
Port 19	Unlimited	Unlimited
Port 20	Unlimited	Unlimited
Port 21	Unlimited	Unlimited
Port 22	Unlimited	Unlimited
Port 23	Unlimited	Unlimited
Port 24	Unlimited	Unlimited
Port 25	Unlimited	Unlimited
Port 26	Unlimited	Unlimited
Port 27	Unlimited	Unlimited
Port 28	Unlimited	Unlimited
Trunk1	Unlimited	Unlimited

Display the configuration of bandwidth control.

3.9 Jumbo Frame



Jumbo frame configuration.

Parameters:

- **Jumbo Frame (Bytes)** specifies the maximum frame size. Maximum frame size could be 1522, 1536, 1552 or 9216 bytes.

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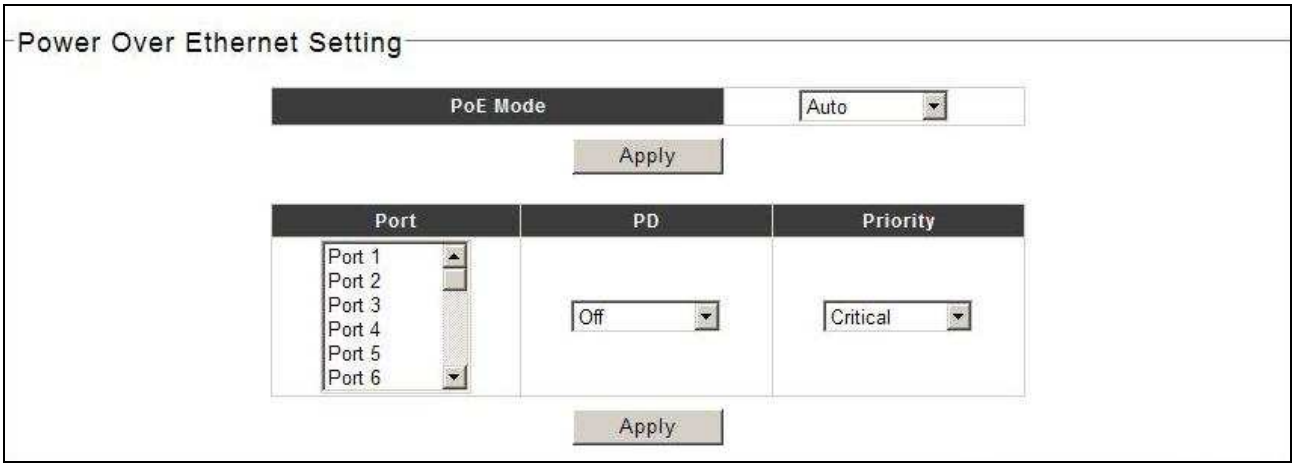
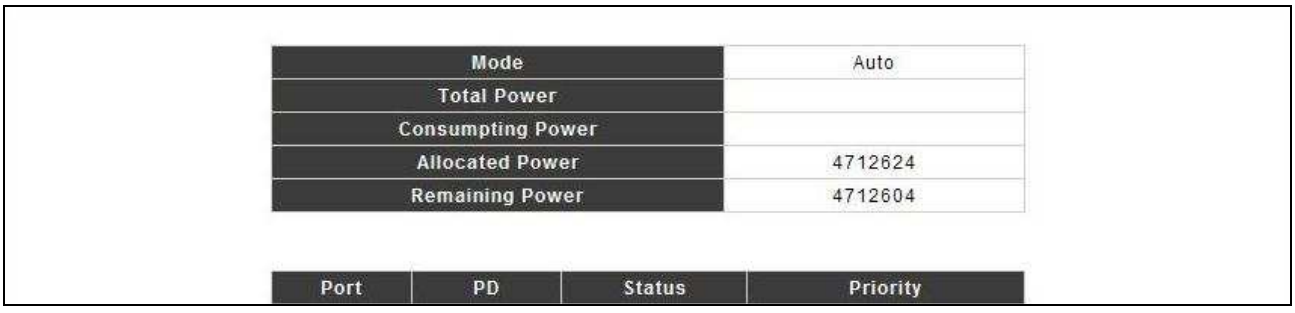
3.10 PowerOverEthernet



PoE configuration.

Parameters:

- **PoE Mode** Set PoE to following mode.
  Auto the power will be provided to PD automatically by hardware.
  Classifcation for system will power the devices order by the power classification of PD.
  Consumption the power will be provided order by the requirement of the PD.
- **Port** specifies the port to set.
- **PD** Enable/Disable PoE port
  Enable/Disable PoE on the specified port by turning the PD field On or Off.
- **Priority** Config PoE port priority
  Set the priority to specified port.
  Critical will try to always to provide.
  High is possible to be lost when the power resource is not available.
  Low will most possible to lost the power in critical operation situation.



Display system-wise Power over Ethernet information, power consumption and per-port status.

- **Mode** to show the current mode of Auto/Classification/Consumption.

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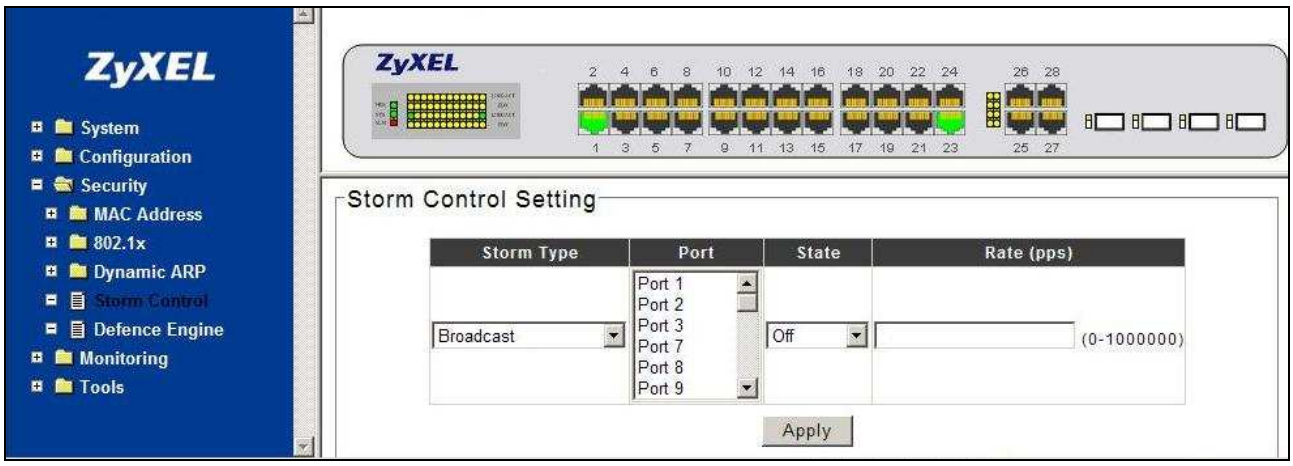
- **Total Power** will display the total power required by the system by (W).
- **Consumption Power** will give the exact power that is consummated by the system by (W).
- **Allocated Power** will show the actual power that is in used of all ports by (W).
- **Remaining Power** will give the power resource remained from Total Power then Consumption power by (W).

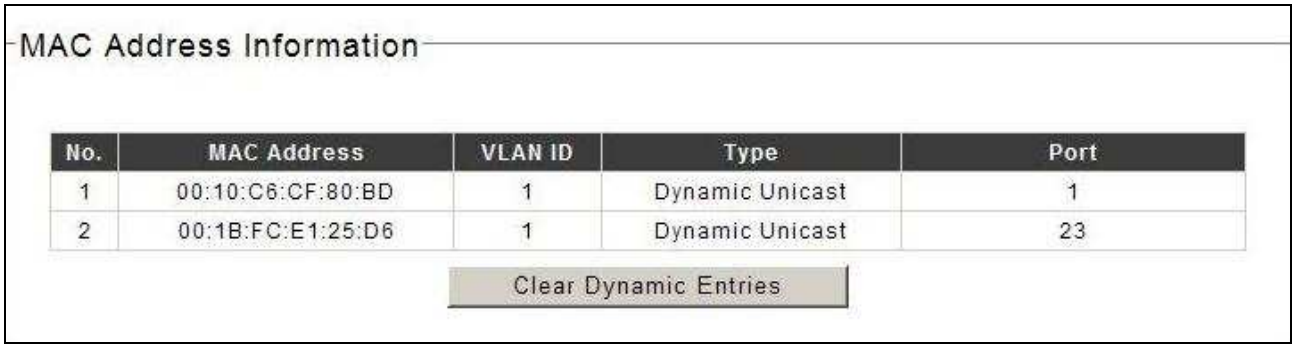
4 Security Configuration



There are "MAC Address", "802.1x", "Dynamic ARP", "Storm Control" and "Defence Engine" configuration web pages in this section.

4.1 MAC Address

4.1.1 MAC Forwarding Table



Display the information of MAC address table, and it can be used to clear dynamic entries.

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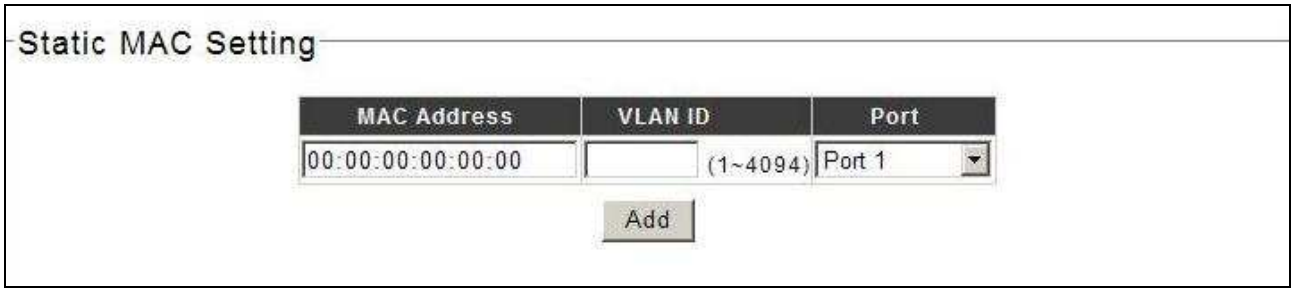
4.1.2 Static MAC



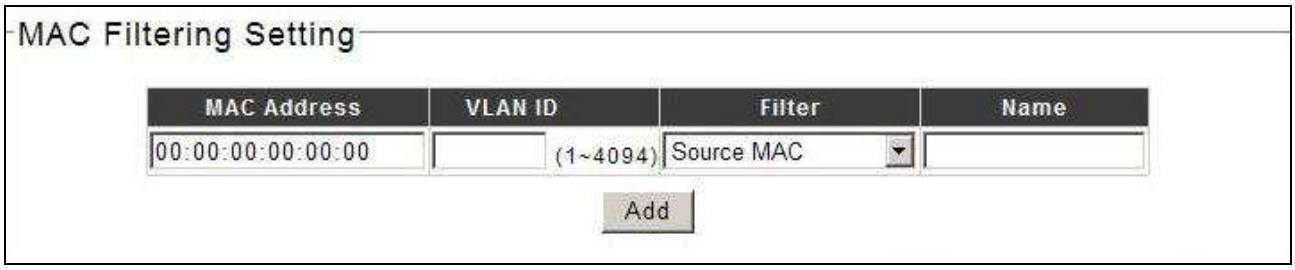
Static MAC entries configuration.

Parameters:

- **MAC Address** specifies the MAC address.
- **VLAN ID** specifies the VLAN ID.
- **Port** specifies the port that the MAC is belongs to.

Display the information of static MAC entries.

4.1.3 MAC Filtering



MAC filtering configuration.

Parameters:

- **MAC Address** specifies the MAC address.
- **VLAN ID** specifies the VLAN ID.
- **Filter** specifies the Source MAC, Destination MAC or Both of filtering type.
- **Name** specifies the entry name, up to 32 characters.

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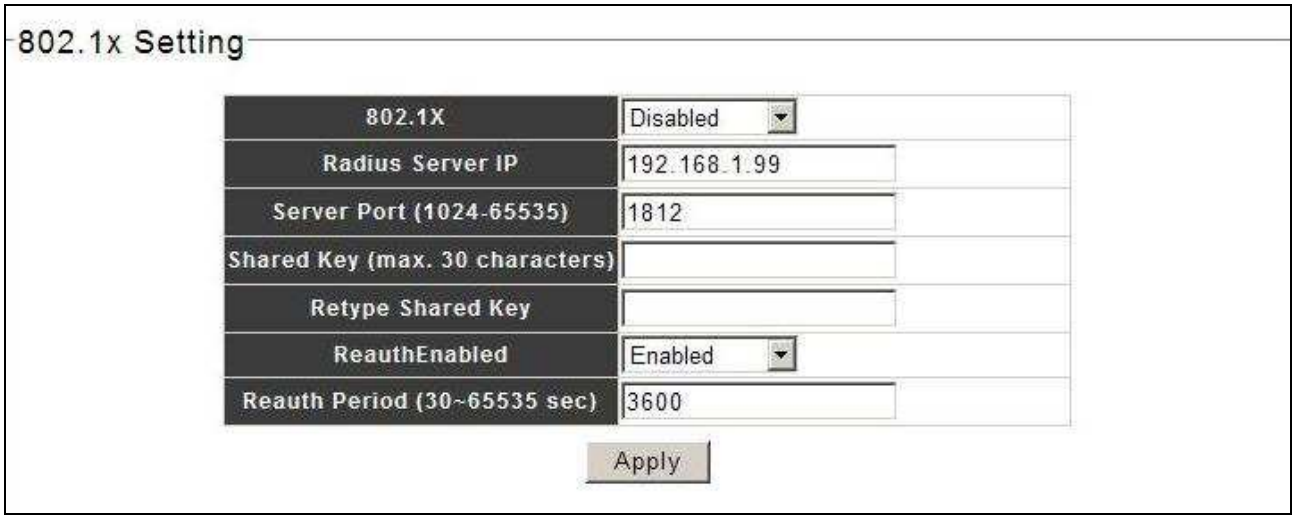
No.	MAC Address	VLAN ID	Filter	Name	Select
1	00:00:00:00:00:03	3	Destination MAC	filter3	☐
2	00:00:00:00:00:04	4	Both	filter4	☐

Delete

Display the information of MAC filter.

4.2 802.1x

4.2.1 802.1x Setting



802.1x configuration.

Parameters:

- **802.1x** enable or disable 802.1x.
- **Radius Server IP** specifies the IP address of radius server.
- **Server Port** specifies the server port number.
- **Shared Key/Retype Shared Key** specifies shared key string, up to 30 characters.
- **ReauthEnabled** enable or disable 802.1x re-auth function.
- **Reauth Period** specifies the re-auth period, in seconds.

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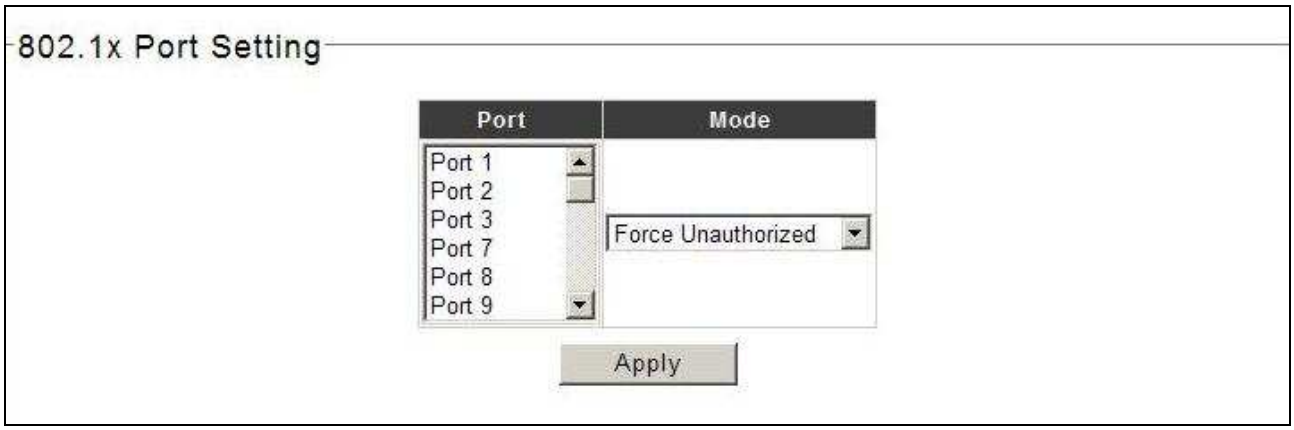
4.2.2 802.1x Port Setting



802.1x port configuration.

Parameters:

- **Port** specifies the port to set.
- **Mode** specifies the **Force Unauthorized**, **Force Authorized**, **Authorization** or **No Authorization** of 802.1x mode.

Port	Mode	State
Port 1	No Authentication	Initialize
Port 2	No Authentication	Initialize
Port 3	No Authentication	Initialize
Port 7	No Authentication	Initialize
Port 8	No Authentication	Initialize
Port 9	No Authentication	Initialize
Port 10	No Authentication	Initialize
Port 11	No Authentication	Initialize
Port 12	No Authentication	Initialize
Port 13	No Authentication	Initialize
Port 14	No Authentication	Initialize
Port 15	No Authentication	Initialize
Port 16	No Authentication	Initialize
Port 17	No Authentication	Initialize
Port 18	No Authentication	Initialize
Port 19	No Authentication	Initialize
Port 20	No Authentication	Initialize
Port 21	No Authentication	Initialize
Port 22	No Authentication	Initialize
Port 23	No Authentication	Initialize
Port 24	No Authentication	Initialize
Port 25	No Authentication	Initialize
Port 26	No Authentication	Initialize
Port 27	No Authentication	Initialize
Port 28	No Authentication	Initialize

Display 802.1x port information.

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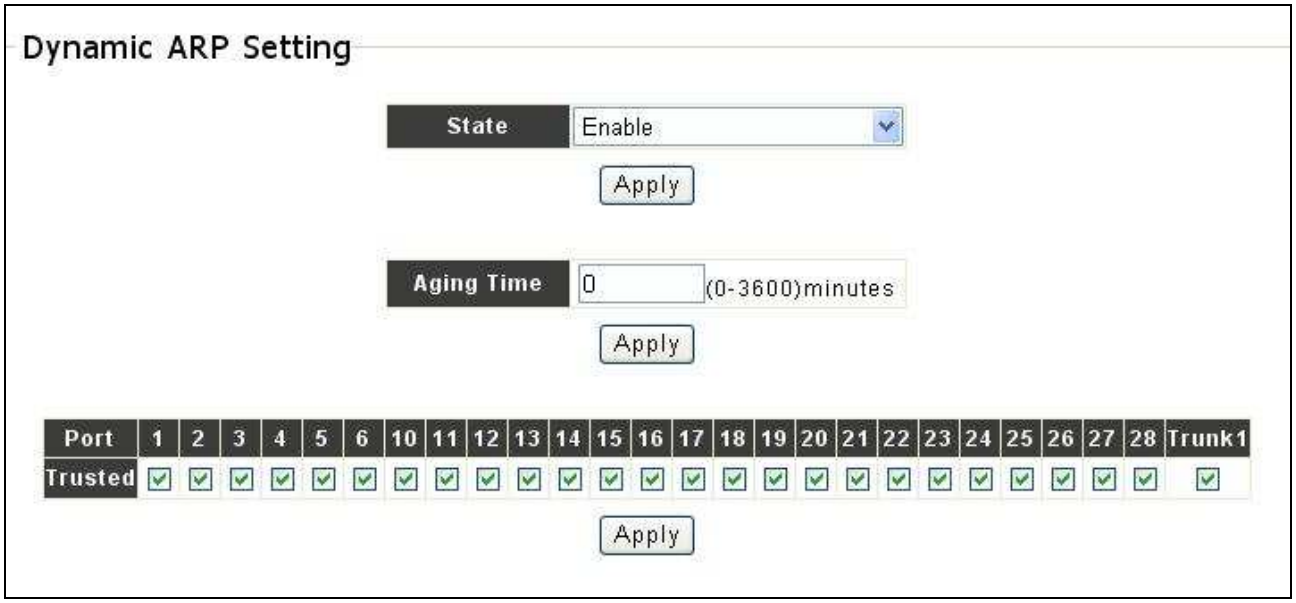
4.3 Dynamic ARP

4.3.1 Dynamic ARP Setting



Dynamic ARP configuration.

Parameters:

- **State** enable or disable dynamic ARP function.
- **Aging Time** specifies the dynamic ARP aging-time, in range 0-3600 minutes. 0 means disable aging time.
- **Port state** specifies the trusted port for dynamic ARP.

Dynamic ARP VLAN configuration.

Parameters:

- **VLAN From** specifies the VLAN start ID, range from 1 to 4094.
- **VLAN To** specifies the VLAN end ID, range from 1 to 4094. The VLAN end ID should be equal to or larger than the VLAN start ID.
- **State** specifies the dynamic ARP VLAN state.

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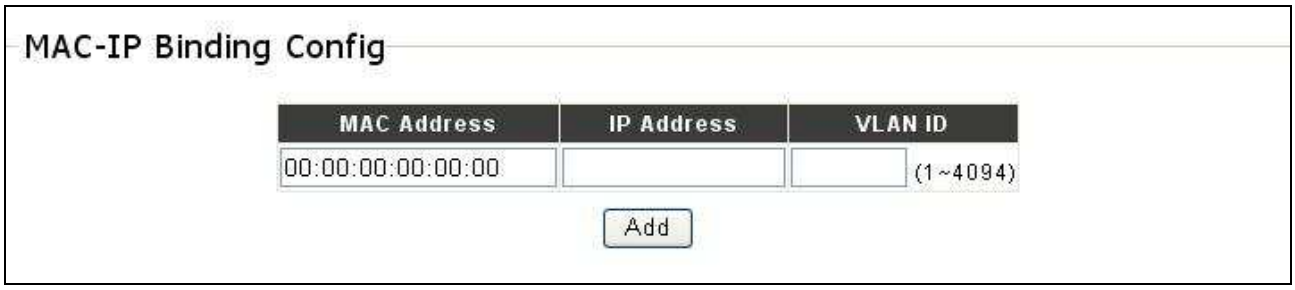
Display information of current dynamic ARP enabled VLAN(s).

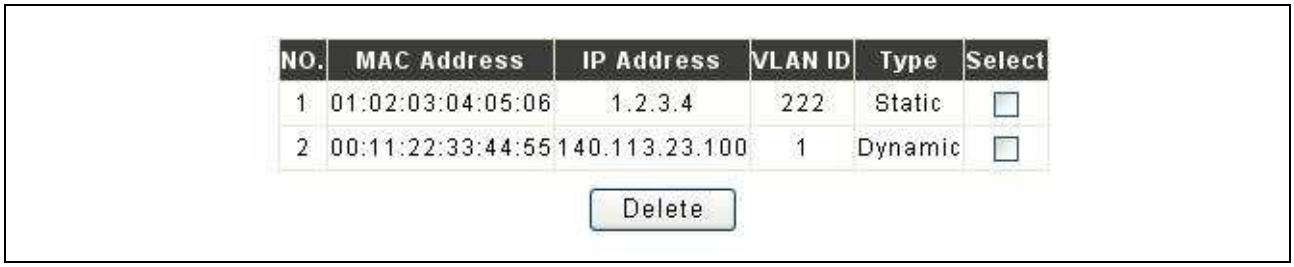
4.3.2 MAC-IP Binding



Dynamic ARP MAC-IP binding configuration.

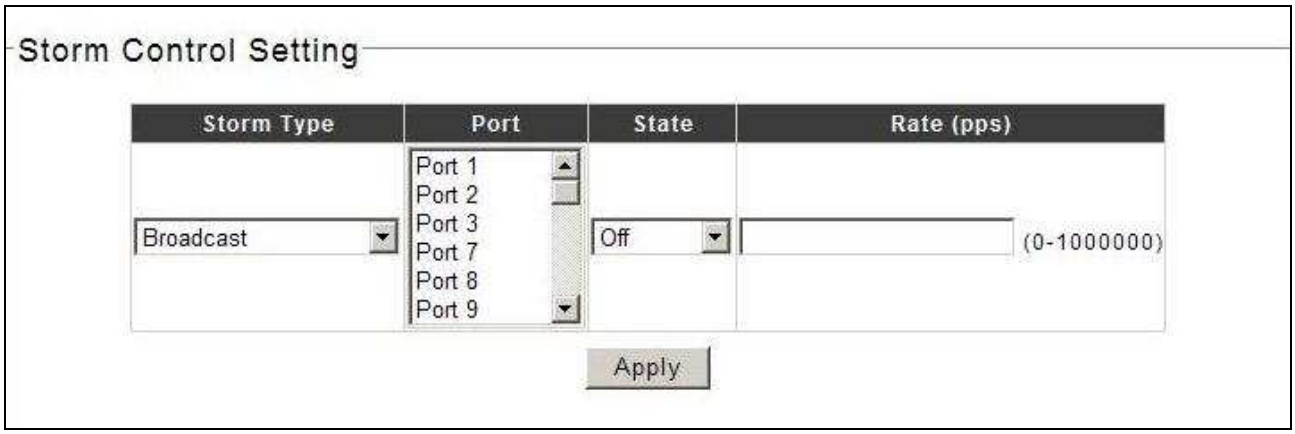
Parameters:

- **MAC Address** specifies the MAC address to be set.
- **IP Address** specifies the IP address to be set.
- **VLAN ID** specifies the VLAN ID to be set, in range 1-4094.



Display ARP table information of dynamic ARP. The entries could be selected to delete.

4.4 Storm Control



Storm control configuration.

Parameters:

- **Storm Type** specifies type to set. Type could be **Broadcast**, **Multicast**, **Unknown Unicast** or **Unknown Multicast.**
- **Port** specifies the port to set.
- **State** turn on or turn off storm control.

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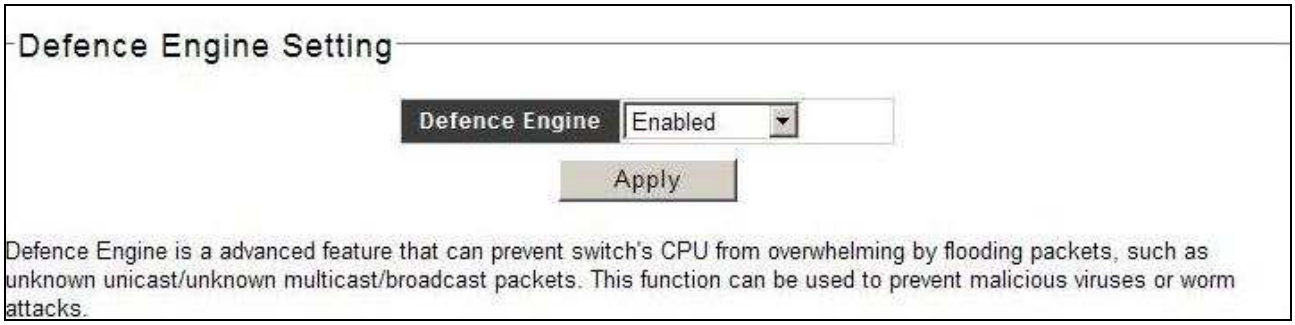
- **Rate (pps)** specifies storm control rate, in range 0-1000000 pps(packet-per-second).

Port	Broadcast (pps)	Multicast (pps)	Unknown Unicast (pps)	Unknown Multicast (pps)
Port 1	12345	Off	Off	Off
Port 2	Off	12345	Off	Off
Port 3	Off	Off	Off	Off
Port 7	Off	Off	Off	12345
Port 8	Off	Off	Off	Off
Port 9	Off	Off	Off	Off
Port 10	Off	Off	Off	Off
Port 11	Off	Off	Off	Off
Port 12	Off	Off	Off	Off
Port 13	Off	Off	Off	Off
Port 14	Off	Off	Off	Off
Port 15	Off	Off	Off	Off
Port 16	Off	Off	Off	Off
Port 17	Off	Off	Off	Off
Port 18	Off	Off	Off	Off
Port 19	Off	Off	Off	Off
Port 20	Off	Off	Off	Off
Port 21	Off	Off	Off	Off
Port 22	Off	Off	Off	Off
Port 23	Off	Off	Off	Off
Port 24	Off	Off	Off	Off
Port 25	Off	Off	Off	Off
Port 26	Off	Off	Off	Off
Port 27	Off	Off	Off	Off
Port 28	Off	Off	Off	Off
Trunk1	Off	Off	Off	Off

Display information of storm control.

4.5 Defence Engine


Defence Engine Setting
Defence Engine
Enabled
Apply
Defence Engine is a advanced feature that can prevent switch's CPU from overwhelming by flooding packets, such as unknown unicast/unknown multicast/broadcast packets. This function can be used to prevent malicious viruses or worm attacks.

Defence Engine configuration.

Parameters:

- **Defence Engine** enable or disable Defence Engine feature.

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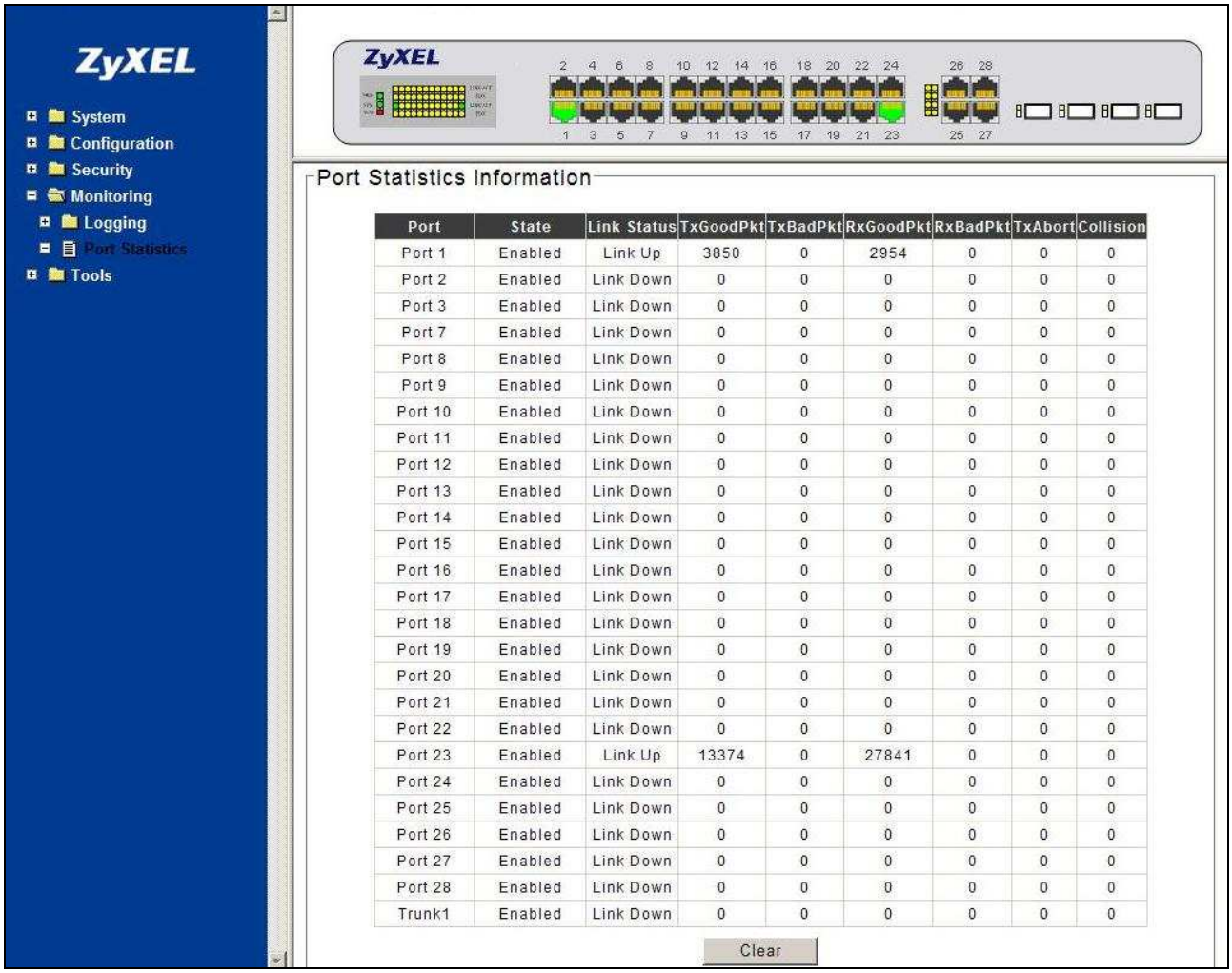
5 Monitoring Configuration

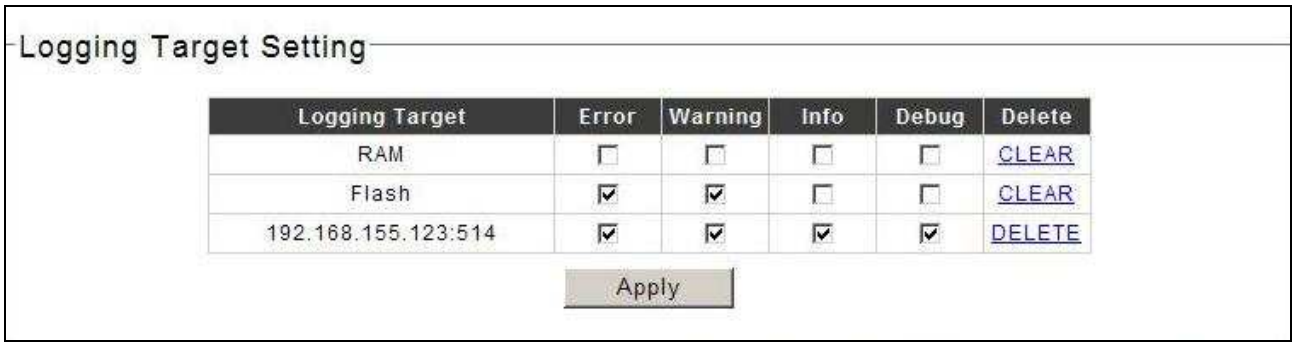


Port	State	Link Status	TxGoodPkt	TxBadPkt	RxGoodPkt	RxBadPkt	TxAbort	Collision
Port 1	Enabled	Link Up	3850	0	2954	0	0	0
Port 2	Enabled	Link Down	0	0	0	0	0	0
Port 3	Enabled	Link Down	0	0	0	0	0	0
Port 7	Enabled	Link Down	0	0	0	0	0	0
Port 8	Enabled	Link Down	0	0	0	0	0	0
Port 9	Enabled	Link Down	0	0	0	0	0	0
Port 10	Enabled	Link Down	0	0	0	0	0	0
Port 11	Enabled	Link Down	0	0	0	0	0	0
Port 12	Enabled	Link Down	0	0	0	0	0	0
Port 13	Enabled	Link Down	0	0	0	0	0	0
Port 14	Enabled	Link Down	0	0	0	0	0	0
Port 15	Enabled	Link Down	0	0	0	0	0	0
Port 16	Enabled	Link Down	0	0	0	0	0	0
Port 17	Enabled	Link Down	0	0	0	0	0	0
Port 18	Enabled	Link Down	0	0	0	0	0	0
Port 19	Enabled	Link Down	0	0	0	0	0	0
Port 20	Enabled	Link Down	0	0	0	0	0	0
Port 21	Enabled	Link Down	0	0	0	0	0	0
Port 22	Enabled	Link Down	0	0	0	0	0	0
Port 23	Enabled	Link Up	13374	0	27841	0	0	0
Port 24	Enabled	Link Down	0	0	0	0	0	0
Port 25	Enabled	Link Down	0	0	0	0	0	0
Port 26	Enabled	Link Down	0	0	0	0	0	0
Port 27	Enabled	Link Down	0	0	0	0	0	0
Port 28	Enabled	Link Down	0	0	0	0	0	0
Trunk1	Enabled	Link Down	0	0	0	0	0	0

There are "Logging" and "Port Statistics" web pages in this section.

5.1 Logging

5.1.1 Logging Setting



Logging target Configuration.

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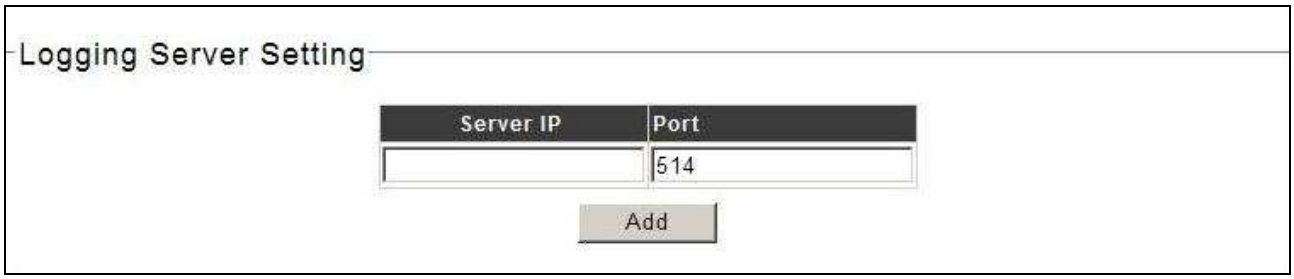
Parameters:

- **Error/Warning/Info/Debug** specifies corresponding log level.
- **CLEAR** specifies clear all logged messages for target type RAM/Flash.
- **DELETE** specifies delete the configured remote syslog server.

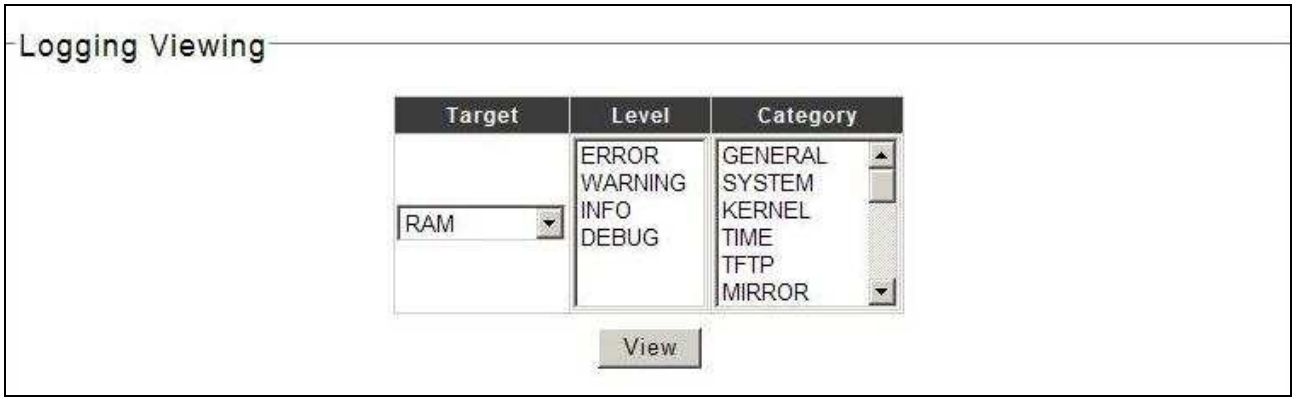


Logging server Configuration.

Parameters:

- **Server IP** specifies remote syslog server IP, up to 4 servers.
- **Port** specifies remote syslog server port number, 1~65535.

5.1.2 Logging Viewing



Logging viewing Configuration.

Parameters:

- **Target** specifies type of target where logged messages are stored, i.e. RAM/Flash.
- **Level** specifies log level of the messages to be viewed.
- **Category** specifies category of the logged messages to be viewed.

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Number	Level	Category	Time	Message
1	WARNING	KERNEL	2000-01-01 00:00:11	
2	WARNING	KERNEL	2000-01-01 00:00:11	*** [RT_ERR] drivers/net/switch/sdk/dal/ssw/dal_ssw_port.c:301: In function 'dal_ssw_port_link_get', error code=0xFFFFFFFF
3	WARNING	KERNEL	2000-01-01 00:00:11	[2][port] semaphore lock failed
4	WARNING	KERNEL	2000-01-01 00:00:11	
5	WARNING	KERNEL	2000-01-01 00:00:11	*** [RT_ERR] drivers/net/switch/sdk/dal/ssw/dal_ssw_port.c:301: In function 'dal_ssw_port_link_get', error code=0xFFFFFFFF
6	WARNING	KERNEL	2000-01-01 00:00:11	[2][port] semaphore lock failed
7	WARNING	KERNEL	2000-01-01 00:00:11	return -1
8	INFO	KERNEL	2000-01-01 00:00:11	Initialize CLE Debug Commands... Success
9	INFO	KERNEL	2000-01-01 00:00:11	Initialize 802.1X... Success
10	INFO	KERNEL	2000-01-01 00:00:10	Initialize LACP... Success
11	INFO	KERNEL	2000-01-01 00:00:10	Initialize MSTP... Success
12	INFO	KERNEL	2000-01-01 00:00:10	Initialize Common Driver... Success
13	INFO	KERNEL	2000-01-01 00:00:10	Initialize DAL... Success
14	INFO	KERNEL	2000-01-01 00:00:10	Initialize MX Packet Driver... Success
15	INFO	KERNEL	2000-01-01 00:00:10	Initialize Switch Core... Success
16	INFO	KERNEL	2000-01-01 00:00:10	Initialize Kernel API Layer... Success
17	INFO	KERNEL	2000-01-01 00:00:10	Initialize Realtek Extended Chip Driver... Success
18	WARNING	KERNEL	2000-01-01 00:00:10	Init RTK Driver Module....OK
19	WARNING	KERNEL	2000-01-01 00:00:10	rtk: module license 'Realtek Semiconductor Corp.' taints kernel.
20	INFO	KERNEL	2000-01-01 00:00:10	Freeing unused kernel memory: 2908k freed
21	INFO	KERNEL	2000-01-01 00:00:10	NET: Registered protocol family 17
22	INFO	KERNEL	2000-01-01 00:00:10	NET: Registered protocol family 1
23	INFO	KERNEL	2000-01-01 00:00:10	TCP cubic registered
24	WARNING	KERNEL	2000-01-01 00:00:10	Physically mapped flash: CFI does not contain boot bank location. Assuming top.
25	WARNING	KERNEL	2000-01-01 00:00:10	Amd/Fujitsu Extended Query Table at 0x0040
26	INFO	KERNEL	2000-01-01 00:00:10	Physically mapped flash: Found 1 x16 devices at 0x0 in 16-bit bank

Display information of logged messages.

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5.2 Port Statistics

Port Statistics Information

Port	State	Link Status	TxGoodPkt	TxBadPkt	RxGoodPkt	RxBadPkt	TxAbort	Collision
Port 1	Enabled	Link Up	13	0	1	0	0	0
Port 2	Enabled	Link Down	0	0	0	0	0	0
Port 3	Enabled	Link Down	0	0	0	0	0	0
Port 7	Enabled	Link Down	0	0	0	0	0	0
Port 8	Enabled	Link Down	0	0	0	0	0	0
Port 9	Enabled	Link Down	0	0	0	0	0	0
Port 10	Enabled	Link Down	0	0	0	0	0	0
Port 11	Enabled	Link Down	0	0	0	0	0	0
Port 12	Enabled	Link Down	0	0	0	0	0	0
Port 13	Enabled	Link Down	0	0	0	0	0	0
Port 14	Enabled	Link Down	0	0	0	0	0	0
Port 15	Enabled	Link Down	0	0	0	0	0	0
Port 16	Enabled	Link Down	0	0	0	0	0	0
Port 17	Enabled	Link Down	0	0	0	0	0	0
Port 18	Enabled	Link Down	0	0	0	0	0	0
Port 19	Enabled	Link Down	0	0	0	0	0	0
Port 20	Enabled	Link Down	0	0	0	0	0	0
Port 21	Enabled	Link Down	0	0	0	0	0	0
Port 22	Enabled	Link Down	0	0	0	0	0	0
Port 23	Enabled	Link Up	34	0	47	0	0	0
Port 24	Enabled	Link Down	0	0	0	0	0	0
Port 25	Enabled	Link Down	0	0	0	0	0	0
Port 26	Enabled	Link Down	0	0	0	0	0	0
Port 27	Enabled	Link Down	0	0	0	0	0	0
Port 28	Enabled	Link Down	0	0	0	0	0	0
Trunk1	Enabled	Link Down	0	0	0	0	0	0

Clear

Display information of port statistics. The statistics would be cleared if the clear button is clicked.

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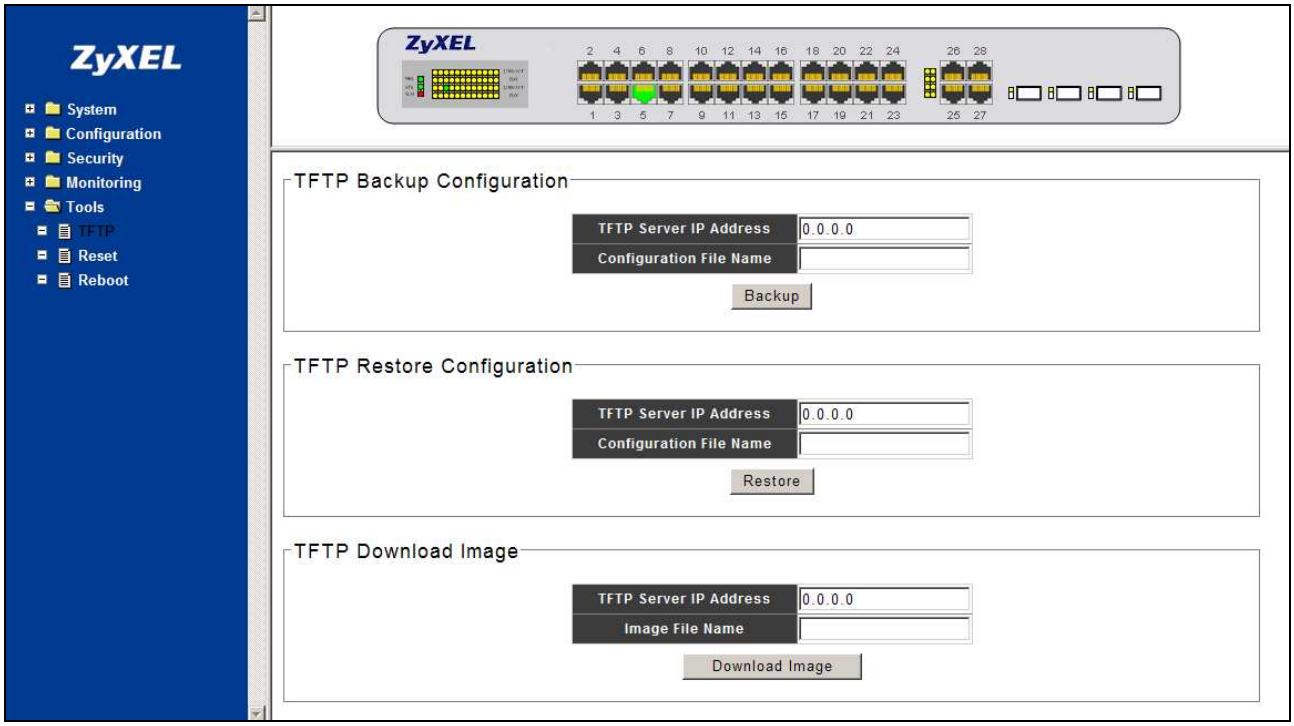
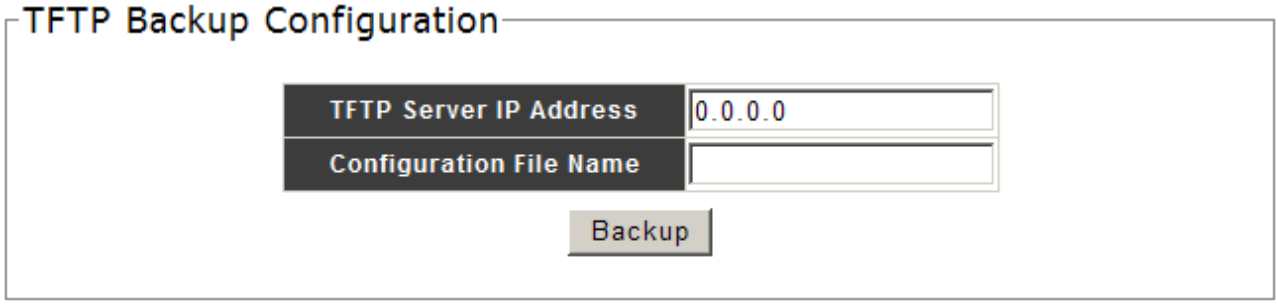
6 Tools Configuration



There are "TFTP", "Reset" and "Reboot" configurations web pages in this section.

6.1 TFTP



TFTP backup configuration.

Parameters:

- **TFTP Server IP Address** specifies the IP address of the TFTP server.
- **Configuration File Name** specifies the file to be downloaded from the TFTP server.

TFTP restore configuration.

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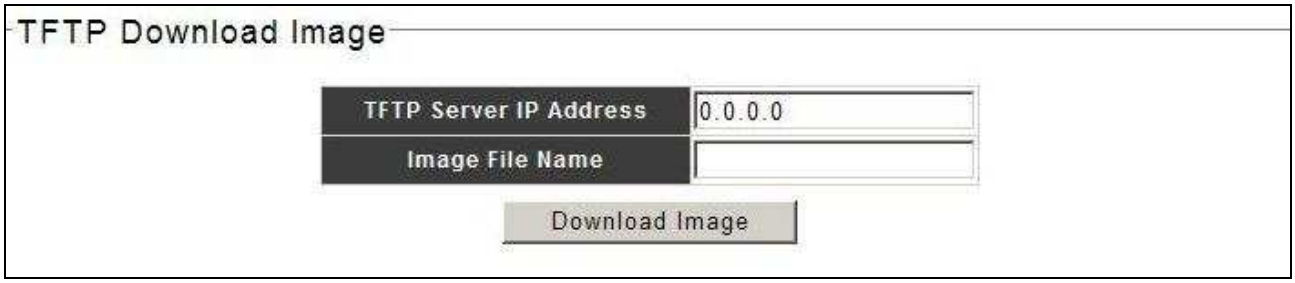
Parameters:

- **TFTP Server IP Address** specifies the IP address of the TFTP server.
- **Configuration File Name** specifies the file to be uploaded to the TFTP server.



TFTP download image configuration.

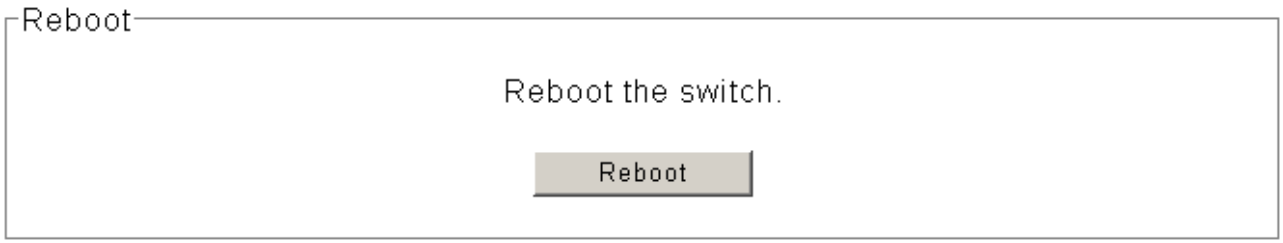
Parameters:

- **TFTP Server IP Address** specifies the IP address of the TFTP server.
- **Image File Name** specifies the file to be downloaded from the TFTP server.

6.2 Reset

Display the reset function. It can reset the switch to factory default configuration.

6.3 Reboot



Display the reboot function. It can reboot the switch.

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